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LABOR

GOSSTROY OFFICIAL EXAMINES LABOR PRODUCTIVITY IN CONSTRUCTION

Moscow SOTSIALISTICHESKIY TRUD in Russian No 8, Aug 83 pp 29-35

[Article by S. Dvornikov, deputy chairman, USSR Gostroy [State Committee for Construction Affairs]: "Stimulating the Growth of Labor Productivity in Construction"]

[Text] The steady improvement in labor productivity in all elements of socialist construction is a very important factor for the growth in the efficiency of public production. This now acquires special significance due to the transition of the economy to primarily an intensive development path and to the sharpening of the nation's demographic situation in the period ahead, when there will be no sources for additional influx of workers to capital construction in general.

The main directions and factors in the growth of labor productivity in construction are: further increases in its level of industrialization and the degree of building and installation prefabrication, the introduction of new progressive structural elements and materials, the improvement of production technology and organization, and the development of cooperation and specialization in construction and installation organizations as well as services for production and manufacturing process outfitting. An exceptionally important role belongs to improvements in the organization and the intensification of socio-economic factors for giving incentives to labor. An analysis of tendencies and rates of labor productivity growth in construction over the past 15 years shows that the share of organizational and socio-economic factors in its overall increase is constantly increasing. In the Eight, Ninth and Tenth Five-Year Plans it was 27, 33 and 36 percent respectively.

Material and moral incentives to workers have an important place in the general system of socio-economic factors for improving construction efficiency and labor productivity. The task is to give collectives and individual workers a material interest in fulfilling plan targets and improving the efficiency of construction operations. A special role in the material stimulation system is played by relations of distribution, which, linking public production with individual and collective consumption, have a decisive effect on production development and labor productivity improvements.

The article of CPSU Central Committee General Secretary, comrade Yu. V. Andropov "The Teachings of Karl Marx and Some Problems of Socialist Construction in the USSR" states: "It is not only important that good work is well rewarded and

receives the public recognition it deserves. It is also necessary that the practice of material and moral incentives in combination with the exemplary organization of labor support and develop in people a consciousness of the usefulness and need for their efforts and the output they produce."

The piece-rate system of payment for labor predominates in construction, where 80 percent of all workers are paid in this manner. It is essentially better than a time-rate system in promoting growth in labor productivity as the level of earnings depends directly upon the volume and quality of the work done.

The successful use of the piece-rate system is to a significant degree determined by the quality of labor norm setting. The System of Unified Norms and Evaluations for Construction, Installation and Repair-Construction Work (YeNiR) was created in construction and has been in operation many years. For special work there are departmental norms and evaluations (VNiR). Normative-research stations in construction ministries develop technically substantiated local norms for that part of the work not covered by the YeNiR and VNiR.

The unified, departmental and local norms for construction times are planned for a level which can be attained by practically all workers in any region of the nation. It is important to stress that their development give consideration to progressive work methods, which have found sufficiently wide use in construction practice. Studies show that the average fulfillment of unified norms is around 105 percent, permitting one to conclude that they are generally taut.

The sector has 740 territorial-research organizations in operation with a total staff of about 14,000 people. The organizational-methodological leadership of their work is conducted by the Central Bureau of Norm Setting for Construction Labor (TsBNTS). Thanks to their efforts construction today is, perhaps, one of the few sectors to be completely provided with technically based production norms for labor outlays. This system of norms includes 75 collections of YeNiR -- about 80,000 norms, 69 collections of VNiR -- about 60,000 norms, and more than 80,000 standard norms for new types of work (structures, materials, machinery and equipment), which, used on projects as local norms, are reviewed by technical norm setting methods and are the basis for supplementing YeNiR and VNiR.

Due to the introduction of new technologies for construction-installation work, mechanization, new materials and structures, every year about 2,000 unified and departmental and 4,000 local norms are developed. Some of the norms for work performed using outdated technology are periodically excluded from YeNiR and VNiR collections. At the same time it should be admitted that these collections are not devoid of various shortcomings. For example, they contain norms for individual working processes, of which there are very many. This naturally increases the work of line engineering-technical personnel in compiling and completing job sheets. In some cases the terseness of standard designs makes possible differing understandings of the organizational-technical conditions and technology of the process being normed.

In construction a search is underway for further improvements in norm setting and new forms of work organization and payment to enhance their stimulative effect upon labor productivity growth.

Work experience at progressive construction-installation organizations shows that the most effective direction in the improvement of norming and labor payments is the development, on the basis of YeNiR and VNiR, of technologically substantiated consolidated comprehensive norms and calculations of labor outlays and earnings for final construction output. For the purposes of this task's practical implementation the TsBNTS has published three collections of consolidated comprehensive norms (UKN) for general construction work, which accounts for about 40 percent of all construction labor content. These not only give consideration to contemporary forms of specialization at contract construction-installation organizations and cooperation and the division of labor at brigades, but also to progressive technological systems for work completion including outlays for basic labor and for the set of technically related and temporally inseparable completion of auxiliary work essential for obtaining the final construction output.

At Glabmosoblstroy [Main Administration for Construction in Moscow Oblast], Minneftegazstroy [Ministry of Construction of Petroleum and Gas Industry Enterprises] (for the construction of the Urengoy - Uzhgorod pipeline) USSR Minenergo [Ministry of Power and Electrification] (for the construction of the Zhival'skaya GES, USSR Ministroy [Ministry of Construction (at the Saratov and Kalinin House Construction Combines) and other construction-installation organizations they use consolidated calculations of labor outlays and earnings, including all auxiliary work on the final measure of construction output: 1 km of pipeline laid, 1 meter of tunnel of the appropriate size driven, the consolidated set of construction-installation work per 1,000 rubles of estimated cost, etc.

The use of consolidated calculations developed by normative-research stations at construction ministries and consolidated comprehensive norms best ensures the direct dependence of earnings upon the brigade's final results, reduces outlays of engineering-technical personnel labor and brings the labor payment system closer to the cost estimation system for construction completion used by clients and contractors.

The time-rate system is used, although to a lesser degree. This system is mainly used to pay on-duty electricians, fitters and workers servicing machinery and equipment. Twenty percent of all construction workers are now in this category. However, their insufficient coverage by norm setting prevents the complete use of the right to expand the combination of professions which was granted to construction organizations in Paragraph 53 of the 12 July 1979 CPSU Central Committee Decree on the improvement of the economic mechanism. Expanding the service zone of time-rate workers and simultaneously increasing payments for their labor to 50 percent is a substantial factor in labor productivity growth. In order to do this construction ministries and departments are developing service and staffing norms and have established a procedure for providing time-rate workers with normed targets and for calculating their fulfillment. At the beginning of the 11th Five-Year Plan this permitted increasing the share of time-rate workers with normed labor from 26.6 to 39.4 percent, and by 1985 it is planned to increase this indicator to 57 percent.

The presence of a system of technically substantiated norms gives the sector the basis to ensure payments for labor in accordance with its quantity and quality. However, these potentials are as yet insufficiently realized. The state plans for the nation's economic and social development over the past 13 years have

increased workers' earnings by 50 percent, while the wage rates effective in construction have not been reviewed since 1969. As a result of this the share of wage rates in the earnings of piece-rate workers in construction is now about 51 percent. In the forthcoming period, in our opinion, it is very important to make decisions on the extent, procedure and forms of correcting the wage rates in construction in order to improve the efficiency of payments for workers' labor.

The radical improvement of production and work organization and the introduction of exemplary order at project sites are a necessary condition and component part of improving payments for labor at all construction organizations. Research on work time losses indicates that a considerable share of them are linked to the unsatisfactory organization of construction operations, untimeliness in supplying production brigades with materials and semifabricated goods, incomplete deliveries of structural elements to projects and the violation of work processes and low quality leading to additional labor outlays.

An important task and a large reserve for improving labor productivity at construction organizations is the extensive introduction of brigade contracts, especially integral flow line ones linking all project participants' work using this method into a unified organizational-technological assembly line. The experience of progressive construction-installation organizations successfully using the integral flow line brigade contract shows that the basis of their success is improvements in production organization and management and its engineering and planning-economic preparation. It is due to the introduction of the component method of construction and the organization of continuous flow line construction-installation work in combination with the planning of its completion and production-technological outfitting directly at consolidated brigades for final output that the integral flow line contract system is effectively used at the Tallinn House Construction Combine, by builders in Karaganda and Apatity, the Shakhovskaya PMK [Mobile mechanized column], PMK No. 247 at Glavmosoblstroy, the administration for the mechanization of construction production at the KamGESenergostroy Association and by others.

This February USSR Gosstroy, USSR Gosplan, Goskomtrud [USSR State Committee for Labor and Social Problems] USSR Gossnab [State Committee for Material and Technical Supply], USSR Ministry of Finance, USSR Stroybank [Bank for Financing Capital Investments], USSR Gosbank and the AUCCTU ratified a new statute on the integral flow line contract in construction, which thoroughly and innovatively solves many problems in expanding the introduction and improving the efficiency of brigade contracts at all process levels of the construction system.

The consolidation of brigades and the creation of final output brigades are important measures in the improvement of work organization. The comprehensive research and analysis of the work of these brigades in various ministries conducted by the VNIPI [All Union Scientific Research and Planning Institute] for Labor in Construction at USSR Gosstroy shows that because of the more reliable coordination of consolidated elements, the payment of labor for final measures of construction output, the expanded sphere of combined professions and other factors, these brigades have higher output, substantially better labor discipline and lower losses of work time for organizational reasons. In consolidating brigades it is advisable to increase supplementary payments to their leaders and also

to the leaders of final output brigades and brigades on autonomous cost accounting. According to studies by this VNIPI, because of the reduced number of brigades this does not require additional resources to pay brigade leaders. It also makes possible a better solution to problems of supplementary pay for the leaders of consolidated units in second shifts.

The awarding of bonuses for reductions in normed time has a central place in the system of material incentives to construction workers. The existing lump wage payment system provides for increases in earnings if this time is reduced, depending upon the quality of the work completed. If the evaluation is "satisfactory" the worker is paid a bonus of 0.5 percent of piece-rate earnings from the job order assignment for each 1 percent reduction in normed time. If the evaluation is "good" the bonus is 2 percent, and if "excellent" -- 3 percent. Practical experience in using the lump wage system in construction has shown it to have an active stimulating effect upon improving labor productivity. This potential should be more completely utilized. Nevertheless, in 1982 the lump wage system only covered 56 percent of all piece-rate workers, including 40.6 percent of those with the right to bonuses. Construction ministries and departments should further expand the use of the lump wage system.

At the same time, this system requires improvement. As is known, the limiting total of bonuses for lump wage job order assignments has been set at 40 percent of piece-rate earnings. In view of the existing high indicators for the fulfillment of output norms, the present procedure of awarding bonuses for completing such assignments has practically no stimulus to the quality of construction-installation work completion, as in many cases it is sufficient for a worker to complete work with a "satisfactory" evaluation in order to obtain a large bonus.

To determine ways of improving the lump sum wage system a number of construction-installation organizations are now experimenting in awarding bonuses to workers separately for reductions in normed time and for the quality of completed work. The first results indicate the advisability of such separate bonuses.

There should also be a solution to the problem of increasing the size of bonuses to all participants in integral flow line brigade contracts.

In addition to bonuses for reductions in normed time under the job order assignment system, there are about 30 other various types and systems of bonuses in effect in construction. In actuality, only a few of them are functioning. It is therefore expedient in 1983-1984 to trim the list of bonus types and systems, all the more because for many of them the total amount of bonuses is less than 1 percent of workers' earnings. Naturally, such bonuses have practically no incentive effect. In our opinion, the main types of bonuses to workers should be: to piece-rate workers -- for the fulfillment and overfulfillment of job order assignments; to time-rate workers -- for the fulfillment and overfulfillment of normed targets; to these and others -- for reductions in the use of materials, energy and fuel compared to norms; for reductions in planned outlays for work completed by contract brigades; for the operational introduction of production capacity and construction projects, and also bonuses from the material incentive fund.

Special attention should also be directed towards improving the efficiency of material incentives. At present more than 50 percent of construction and installation trusts are unprofitable. This means that it is impossible to award bonuses from the material incentive fund formed through deductions from profits. In many cases the reasons are not necessarily the trusts' bad work.

Due to the constancy of estimated prices and the increased prices for construction materials, estimates do not now cover the actual expenditures of the construction-installation organizations. Estimates and expenditures for earnings are not covered because of the lack of correspondence between their planned levels and the levels of actual wage rates. The introduction, on 1 January 1984, of the new estimate norms and prices in construction will create more objective conditions for ensuring the profitability of construction-installation organization work and consequently for improving the efficiency of existing material stimulation systems. Another problem is that the more extensive use of the lump wage payment system requires, in a number of cases, an increase in estimated resources to compensate construction-installation organization expenses for these purposes.

The material stimulation of workers and improvements in its efficiency should not be examined without viewing its connection to moral incentives. Construction practice in our nation has shown the great vital force and efficiency of moral stimuli for improving labor productivity. Public approval and recognition of the successes of labor collectives and each worker are just as important to them as are bonuses. Moral stimulation is directed above all towards improving workers' creative activity. It is most clearly manifested in socialist competition, an important means of involving workers in production management educating them in a feeling of responsibility and honesty and of improving labor productivity.

Construction has a generally acknowledged organizational form for socialist competition based on the principle "The Workers' Relay-Race", the slogan of which is: "From Mutual Complaints to Mutual Help and Support". Born during the construction of the Nurek GES, this form of competition is successfully used by builders in Moscow, Kiev, Leningrad, construction-installation organizations of the USSR Ministry of Heavy and Transport Machine Building, the USSR Ministry of Power and Electrification and others. The "Workers' Relay-Race" unites the creative efforts of all participants in construction: designers, suppliers of manufacturing process equipment, construction-installation organizations and enterprises producing structural elements, towards the achievement of the final goal -- the on-time introduction of projects with minimum outlays of effort and resources. Combining their overall obligations, construction participants help one another in work and see to the strict observation of contractual obligations.

The initiative of Sverdlovsk builders, "The five-year target of brigades with fewer personnel", has been recognized and applied not only in construction, but also in other sectors of the economy. It is directed towards finding and using reserves for labor productivity growth directly at work sites and towards releasing personnel.

As is known, the most important principles in the organization of socialist competition, formulated by V. I. Lenin, are: publicity, comparability, the

possibility of repeating progressive experience and of its widespread application. The strict observation of these conditions is the basic condition for improving the effectiveness of socialist competition. It should be noted, however, that in some construction organizations these are not always carefully observed. There are instances of formalism in summing up competition results. Improvements are needed in the indicators for evaluating the work of participants. These shortcomings negatively effect the objectivity of public appraisal of work results of collectives and individual builders. This naturally reduces the moral stimuli towards improving work.

It is advisable to limit and refine the circle of indicators taken into consideration in summing up results of socialist competition. It seems to us that in addition to the fulfillment of plan targets for the operational introduction of projects and production capacity, the most important indicator of construction-installation collective work efficiency should be the attained level of labor productivity, the most characteristic feature of work activity. This indicator should be the basic one in summing up competition between brigades and workers. A limited number of other indicators should be considered as supplementary.

This article has examined far from all of the problems and aspects of the condition and enhanced role of material and moral stimuli for improving construction labor productivity and efficiency. Labor productivity growth in construction depends to a considerable degree on improvements in the earnings and on the stimulation of the labor of line engineering-technical personnel and employees. The timely solution of these very important problems is foreseen by the work plans of USSR Gosstroy, USSR Goskomtrud and their subordinate scientific-research organizations. This will assist in improving the efficiency of our nation's capital construction, a task posed by the November (1982) CPSU Central Committee Plenum.

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LABOR

ECONOMISTS OUTLINE FARM LABOR POLICIES, TRENDS

Moscow SOTSIALISTICHESKIY TRUD in Russian No 7, Jul 83 pp 40-50

[Article by N. Lagutin and L. Bondarenko, candidates of economic sciences:
"The USSR Food Program and the Social Development of the Countryside"]

[Text] The USSR Food Program, which was approved by the May (1982) Plenum of the CPSU Central Committee, fosters an integrated approach to the resolution of a vitally important problems in our country's socioeconomic development-- the food problem. The program clearly articulates specific tasks for all branches of the agro-industrial complex, for all union republics. And in each of them, people will have to work hard to make a real contribution in the near future to the cause of securing the uninterrupted supply of food to the population and of substantially improving the structure of the diet. To this end, the program calls first of all for the further strengthening of the material and technical base, for better management and for the balanced and dynamic development of all branches of the agro-industrial complex.

Like any large-scale program, the success of the Food Program depends on the degree to which those actually responsible for its execution understand the tasks of the program and on the degree to which they are personally interested in achieving these tasks. And this in turn depends on the degree of completeness and consistency with which we approach the problem of improving the entire complex of living conditions of those directly involved in implementing the program. It is for this very reason that measures relating to the social restructuring of the countryside are an integral part of the USSR Food Program. The thrust of these measures is that in the countryside labor must be mechanized and made easier and well-appointed homes, schools, preschool institutions, clubs, libraries, medical institutions, trade and consumer service facilities, and roads must be built at a more rapid pace and on a larger scale compared with the city than in the past and the level of wages must be raised depending on improvements in the end results of labor.

The task is to see to it that the capital investments allocated for these purposes in the Food Program are used with maximum effectiveness and expediency in every union republic, oblast (krai) or rayon and on every kolkhoz and sovkhoz. And this task must be carried out with regard to the experience

of the five-year plans that have elapsed since the March (1965) Plenum of the CPSU Central Committee which adopted a new course for the agrarian policy of the CPSU envisioning a coordinated approach to the resolution of two equally important and interconnected tasks--the production task and the social task--in the countryside.

In the last three five-year plans, 60 billion rubles of capital investments in agriculture were expended on the restructuring of the countryside. This was four times more than the total amount the Soviet government spent on these purposes in the entire preceding history of its development. As a result, it became possible to accelerate the transformation of agricultural labor into a type of industrial labor, to launch a sizable program for the construction of housing, consumer service and sociocultural facilities in the countryside and to make substantial progress in solving the problem of the living standard and life style between town and country.

Nonetheless the socioeconomic transformation of the countryside has been at a slower pace than necessary for the resolution of production problems in the countryside and has lagged slightly behind the rapidly growing needs of rural dwellers. Dissatisfaction with working and living conditions has prompted the most highly skilled and youngest rural dwellers to migrate to the city. In a number of regions, especially in the Nonchernozem Zone of the RSFSR, in Belorussia and in the Baltic republics, migration has led to a manpower shortage on kolkhozes and sovkhoses and has complicated the demographic situation. The manpower shortage in the countryside, especially in harvest time, has to an ever greater degree been compensated by summoning blue and white collar workers from the city which cannot but have a negative impact on the general effectiveness with which social labor is used. In many instances, the shortage of skilled manpower in agriculture (equipment operators, animal husbandrymen, specialists) is a serious impediment to the utilization of technical advances in the branch.

Accordingly, in the effort to accelerate the development of the agro-industrial complex, it is important to remember that we are specifically discussing a complex of problems and that none of the tasks are of secondary importance. In the social restructuring of the countryside, progressive changes in agricultural labor are of decisive importance. It is these changes that ultimately determine the improvement of the living standard and life style of the rural work force. Even though the technical base of agricultural production was significantly strengthened after the March (1965) Plenum of the CPSU Central Committee, agrarian labor still lags to a significant degree behind industrial labor in the level of technical inputs per worker. Capital per worker in agriculture (not counting the value of draft and productive stock) is five-ninths of the level in industry, on sovkhoses, it is 67 percent of the level in industry and on kolkhozes--55 percent. Two-thirds of the sovkhos workers and kolkhoz farmers perform their work manually (unassisted by machines and mechanisms). However in our opinion technical inputs per worker should in principle be higher in agriculture than in industry because many types of equipment must inevitably be used seasonally in agriculture.

A special integrated program to curb the use of unskilled manual labor and heavy physical labor in all branches of the national economy is being developed in response to the dictates of economic and social necessity. Heavy unskilled labor does not make it possible to elicit man's creative abilities to the fullest, inhibits the harmonious development of the individual to a certain degree and has a negative impact on the structure of the consumption of material and nonmaterial goods and services and on the use of leisure time. The character of labor plays an ever greater role in the system of Soviet man's life values. And it is not surprising that the unappealing nature of certain types of agricultural work under present conditions is one of the main reasons behind the migration of the work force from rural areas.

Taking these economic and social factors into account, the Food Program calls for the acceleration of scientific and technical progress in agriculture, for the consistent industrialization of agricultural labor by strengthening its technical base, by raising the level of mechanization, chemicalization and electrification of production. The decree of the CPSU Central Committee and USSR Council of Ministers "On Measures for Further Raising the Technical Level and Quality of Agricultural Machinery and Equipment, for Improving Their Utilization and for Increasing Their Production and Delivery in 1983-1990" calls for the further supply of kolkhozes and sovkhozes with new, highly productive equipment. Large-scale mechanization of agriculture and animal husbandry should for the most part be completed before 1990. In the space of 10 years the countryside is slated to receive 3740-3780 thousand tractors, 1170 thousand grain harvesting combines and large quantities of other types of equipment in keeping with the adopted system of machines. Increased attention is focused on making machinery easier to maintain, on creating a production environment that eliminates occupational diseases and job-related traumatism. In particular, in order to improve the working conditions of equipment operators, comfortable cabs will be designed for tractors and self-propelled machinery with improved esthetic and ergonomic indicators.

Electronic equipment will be widely used to automate the monitoring, regulation and control of production processes in the field, to protect against accidents and to switch gears.

The consumption of electric power in production and in the home will grow at a rapid pace. Agriculture's electric power supply must roughly double and must amount to 210-235 billion kilowatt-hours in 1990 (compared with 1980).

The practical utilization of advances in science and technology depends in large measure on the thorough training of the work force. A high skill level, the necessary volume of specialized knowledge and man's general cultural level become obligatory conditions to effective labor. The considerable (absolute and relative) increase in the number of specialists with higher and secondary education and equipment operators is a characteristic feature of the countryside today. New, modern occupations have come into being, have been combined with one another and the spheres of application of labor are being expanded. Workers in approximately 160 occupations

and specialties are presently employed on kolkhozes and sovkhoses. The number of equipment operators has increased from 3.1 million persons in 1965 to 4.5 million in 1982. Rural dwellers are now working at industrial enterprises, in transport, in construction, in communications, and in the service sphere. One-tenth of the rural work force is employed in public education, science, culture, art and health care. The share of persons with higher and secondary education in the overall rural work force rose from 31.6 percent in 1959 and 49.9 percent in 1970 to 75.8 percent in 1982 and approximated analogous indicators in the city (from 56.4 and 74.8 to 88.8 percent, respectively).

The number of agricultural specialists working on kolkhozes and sovkhoses has more than trebled during the last three five-year plan periods and presently exceeds 1.6 million. While in the recent past, by no means did every kolkhoz have a specialist with higher or secondary education, the average farm today has 27 specialists including 9 with higher education. Ninety-seven percent of the 25,900 kolkhoz chairmen have higher and secondary specialized education (in the Ukraine, in Belorussia, in Moldavia and in Kirghizia--99 percent). Ninety-nine percent of the 21,700 sovkhos directors have higher and secondary specialized education (in Lithuania, Kirghizia, Turkmenia and Estonia--100 percent).

Steady progress is being made in strengthening middle management, the role of which is growing significantly in connection with the increasing complexity of agricultural production. Thus in the Ukrainian SSR, all kolkhozes, sovkhoses, rayons, oblasts and the republic as a whole have integrated plans governing work with cadres. Middle management is trained in 3 special technicums, 21 oblast management schools and in specialized departments in 48 technicums. These institutions train 6000 specialists a year. In 1980, specialists headed 74 percent of the middle-echelon subdivisions in agricultural production in the Ukraine and in Donetsk, Crimean, Ivano-Frankovsk, Ternopol, and Chernovitsy Oblasts--82-85 percent. For the sake of comparison, we recall that in 1975 this indicator was 38 percent for the entire republic.

Measures taken by the party and government to develop the rural secondary school, to introduce polytechnical education in the rural secondary school, to expand the network of vocational-technical training schools, and to convert many of them to the training of specialists with secondary general education; the increase in the number of training combines; and the organization of vseobuch [universal secondary education?] for equipment operators in the countryside were instrumental in increasing the number of skilled cadres in agriculture.

The specialization and concentration of agricultural production based on interfarm cooperation and agro-industrial integration are an important factor in accelerating the transformation of agricultural labor into a type of industrial labor. As we know, the specialization of production and the concentration of material, financial and labor resources on the basis of integrated production formations significantly increase the possibility of using systems of various types of highly productive machines in agriculture.

The most common types of workers in these integrated formations are persons who operate and service machines and mechanisms. While in 1932, the share of tractor-machinery operators and truck drivers in the work force in all branches of production was 16.6 percent on kolkhozes and 17.4 percent on sovkhozes, at interfarm agricultural enterprises it exceeded 30 percent.

In the process of agro-industrial integration, the labor of the rural work force acquires such features of industrial labor as continuousness and rhythmicity. By transferring the work force to related branches, it is possible to provide more uniform employment throughout the year. In the process, people master two or three occupational specialties, strive for the best results and their wages are raised accordingly.

The relatively more rapid rate of increase in the wages paid for agricultural labor and the gradual reduction of differences in material living conditions in town and country are the result of changes in the character of labor and working conditions, the improvement of the occupational and skill structure of the work force and the growth of labor productivity (at the same time that an ever increasing degree of uniformity is secured in the remuneration of labor of the same complexity, arduousness and intensiveness in industry and in the agrarian sector of the economy). Between 1966 and 1980, the average monthly wages of blue and white collar workers of sovkhozes and other agricultural enterprises doubled (increased from 75 to 149.2 rubles); kolkhoz farmers' earnings increased 2.3 fold and reached 118.5 rubles in 1980. Throughout the same period, the rise in wages throughout the national economy as a whole was 75 percent (to 168.9 rubles) and for all categories in the industrial work force--78 percent (185.4 rubles).

Relatively more rapid growth rates of wages in agriculture are preserved under the 11th Five-Year Plan: during the quinquennium, the earnings of kolkhoz farmers are slated to increase by 20 percent (according to plan, they will total 142 rubles a month by the year 1985); earnings of blue and white collar workers in the national economy are slated to increase by 14.5 percent (rising to 193 rubles, respectively). It must be said that the correlation indicated in the plan is being sustained.

The May (1982) Plenum of the CPSU Central Committee approved a number of practical measures aimed at strengthening the material incentives of the agricultural work force. The State Plan for the Economic and Social Development of the USSR in 1983 calls for increases in the salaries of managerial personnel, specialists and white collar workers of sovkhozes and other agricultural enterprises in Siberia, the Far East, the Urals, the Central-Chernozem Region and the Nonchernozem Zone of the RSFSR. In these areas, there are wage increments for continuous service at a given enterprise and animal husbandrymen receive additional leave time; regional (wage) wage coefficients are being introduced for agricultural workers in most oblasts in the Urals and Kazakhstan and other benefits are also being instituted in line with the Food Program. The expanded use of payments in kind is of great importance. It is specified that workers in grain-growing brigades and links will receive bonus pay in the sum of up to 15 percent of the harvest in excess of the plan.

The planned increase in the level of wages on kolkhozes and sovkhozes must be secured by strengthening their connection with the final results of production, must be based on improvements in these results and must not be automatic. The brigade form of labor organization and wages--the collective contract which as experiments show makes it possible to increase labor productivity, to increase output, to improve product quality, and to lower the prime cost of production--is primarily instrumental in the realization of this task.

The Politburo of the CPSU Central Committee approved the experience of kolkhozes, sovkhozes and other state agricultural enterprises in applying the collective contract thereby attaining high results for minimum manpower and resources. It ordered party and soviet organs of republics, krais, oblasts and rayons, ministries and departments to step up organizational work on the broad incorporation of the collective contract in kolkhoz and sovkhoz production, to secure the strict observance of voluntary principles in the formation of labor collectives and to create the necessary production and economic conditions for them.

In addition to the rising level of wages, which are the main form of distribution under socialism, the rural population is also receiving more benefits from social consumption funds. This form of distribution makes it possible to provide increasingly equal opportunity to satisfy the social and nonmaterial requirements of urban and rural dwellers. While in 1970, pensions, scholarships, grants and other payments and benefits from social consumption funds (including free education, free medical care, etc.) comprised 21.5 percent of the aggregate income of blue and white collar workers' families, they comprised 17.9 percent of the income of kolkhoz farmers' families (7.4 points less), in 1981 the corresponding figures were 22.9 and 19.1 percent (3.8 points less). This trend will evidently also undergo further development in connection with the implementation of a large number of measures contained in the USSR Food Program and in program of the 26th Congress for social development and for raising the people's living standard.

It is appropriate to note here that the time is ripe to calculate the total sum of payments and benefits from social consumption funds (as well as to make calculations for individual items) that both the urban and rural population should receive according to plan in a given period. The fact of the matter is that for a long time the kolkhoz peasantry has not represented the entire rural population. In 1982, the share of the kolkhoz peasantry in the nation's total population was 13.3 percent (compared with 31.4 percent in 1959) while the share of the rural population was 36.4 percent (in 1959--52 percent). Accordingly, the kolkhoz peasantry today comprises slightly more than one-third (36.6 percent) of the rural population whereas in 1959 the kolkhoz peasantry comprised more than 60 percent.

In the process of evaluating the way in which differences in the income levels of the urban and rural population are reduced, it is naturally important to take into account wages, receipts from social consumption funds and the potential for the development of the population's personal household plots. The level of the real income of kolkhoz farmers vis-a-vis the real income of blue and white collar workers per family member, which was 62

percent in 1960 and 75 percent in 1965, rose to 80 percent in 1970 and more than 90 percent in 1982. However it must also not be forgotten that the growth of income, including money income, has real economic meaning only if it is reinforced by a corresponding increase in trade and by improvement in its structure.

In the last 20 years (1961-1980), the sale of all goods per dweller increased almost 3.3 fold (from 174 to 568 rubles) in rural areas and in the city increased 2.3 fold (from 564 to 1283 rubles). Thus the average annual rate of increase in the volume of goods sold in the countryside was 1.45 times higher than in the city. And nonetheless the absolute difference in the volume of sales per urban and rural dweller, which in 1960 amounted to 390 rubles (in favor of the city) not only did not diminish but to the contrary steadily increased.

The explanation that the rural population buys less food in stores because it obtains food from its own personal household plots and from kolkhozes and sovkhoses cannot be taken seriously. The fact of the matter is that subsidiary farming in the countryside has greatly declined in recent years. The share of rural families without privately owned livestock is now 31 percent. Over 50 percent of the rural families do not have their own cows and over 65 percent do not have their own pigs. As a result, the demand of rural dwellers for the corresponding foodstuffs is growing slightly more rapidly than the demand for nonfood commodities.

Many rural dwellers must leave their work in social production and spend time and money travelling to the city to shop for a considerable quantity of goods. The overall volume of such shopping in cities has increased substantially between 1960 and 1965. Thus a survey of families reveals that rural dwellers presently make approximately 40 percent of their total nonfood purchases in urban stores.

The insufficient volume and assortment of goods in stores and the insufficient development of the service sphere in rural areas reduce the material motivation to work and lead to the "settling" of disposal funds in savings accounts or to the formation of so-called deferred demand. In the last 20 years, the sum of cash on deposit in rural savings banks rose more than 19 fold, the average sum on deposit increased more than 7.5 fold and is now 116 rubles more than in the city (71 rubles less in 1960).

It must be said that much has been done in recent years to develop the material and technical basis of trade and public catering in the countryside. For example, between 1971 and 1980, consumer cooperatives built 40,700 enterprises with 6.76 million m² of showroom area. This means that almost half of the showroom area in rural areas today was built during the last three five-year plans and are adapted for modern forms of trade. Every day, 20 million rural dwellers avail themselves of the services of cooperative public catering enterprises. However, this rate has proven to be insufficient. Only 39 percent of the rural population centers have a nonmobile consumer cooperative trade network. Mobile trade services are developing at a slow rate.

Nor are the specifics of rural trade sufficiently taken into account in the planning process. Neither USSR Gosplan nor the USSR Ministry of Trade plan trade separately for cities and rural areas. This is done only in ministries of trade of union republics. But this is evidently not enough because the difference in the actual volume of sales of goods per urban and rural dwellers has continuously grown and continues to grow in literally all republics. In order to carry out the tasks posed in the Food Program, it is important that the growth of the income of rural dwellers be reinforced by a corresponding increase in trade, in the volume of paid services, etc.

An important role in this regard can and should also be played by the development of consumer services for the rural population. These services have developed at quite a rapid rate in recent time. Between 1966 and 1980, the per capita volume of consumer services in rural areas increased more than tenfold. At the present time, rural dwellers are served by 113,000 consumer service enterprises. They include combines, pavilions, consumer service receiving points and specialized enterprises: barber shops, photography shops, bath houses, laundries, etc. Rayon centers and large villages are building consumer service centers--modern, highly mechanized enterprises that render the population both traditional services and services that are also new to the countryside (dry cleaning, repair of household appliances, construction and repair of apartments, repair and fabrication of furniture, etc.). The consumer service center is the basis for organizing mobile brigades and shops that take orders in remote population centers, in divisions, in brigades and on farms.

In accordance with the Food Program, the increase in the volume of rural consumer services in the 1980's will surpass their increase in the 1970's 1.7 fold and their assortment will be expanded.

For all the importance of progressive transformations in the sphere of agricultural labor, of raising labor productivity and wages and the more complete satisfaction of the rural population's demand for goods and services, these measures are nonetheless not sufficient to retain skilled cadres in the countryside and to improve the demographic situation. It is important to secure improvements in the total aggregate of living conditions of rural workers: not only working conditions, income and consumption levels but also the supply of housing, amenities in housing, and the further development of education, health care, culture and sport in the countryside. In the program for social development of the countryside, special significance is attached to measures aimed at the acceleration of housing construction.

The State Plan for Economic and Social Development of the USSR in 1983 called for the allocation of 5.2 billion rubles of capital investments in the construction of housing, municipal service, cultural and consumer service facilities, i. e., eight percent more than in 1982. We note that on the whole, capital investments in the development of the agro-industrial complex are increasing by 4.3 percent.

A good, well-appointed home is the basis of harmonious life and rest and is a condition to fruitful work. The policy of accelerated expansion and renovation of rural housing on the basis of modern standard designs--a

policy that is being consistently implemented in a number of regions throughout the nation--helps to attract and retain skilled equipment operators, animal husbandrymen and specialists in agriculture and is instrumental in rejuvenating the countryside. Experience in resolving the housing problem has been amassed in Krasnoyarsk Kray and in Omsk, Saratov, Dnepropetrovsk, Orel and a number of other oblasts. Thus in Orel Oblast, the rural housing inventory increased by 41 percent during the 10th Five-Year Plan; every year the average sovkhoz built 24-25 apartments and the average kolkhoz built 12-15 apartments. At the same time, cultural and consumer service facilities have been built along a broad front. The result has been a sharp reduction in personnel turnover on farms and an increase in the oblast's rural population by 25,000 persons.

The experience of Lipetsk Oblast, which has developed a special rural construction program calling for the development of additional capacities on the basis of organizations specializing in rural construction, for increasing the production of local building materials, for the broad use of the urban housebuilding base, for the expansion of individual and cooperative construction and for using the equipment, materials and manpower of industrial enterprises, merits attention and dissemination. In 1981, more than 3800 apartments were built there. This was 70 percent more than called for in the state plan. The 11th Five-Year Plan calls for doubling the volume of housing to be put into operation in comparison with the preceding five-year plan.

Interesting and useful experience has been amassed in Moscow Oblast where a special program envisages the refurbishment of approximately 5000 villages--practically the oblast's entire area-- by the year 1990. By 1986, 80 percent of the total volume of rural housing construction will be in the form of farmstead-type dwellings. The degree of satisfaction of the rural population's requirement for well-appointed housing is rising with each passing year. During the last three five-year plans, approximately 500 million m² or roughly 5 m² per dweller (financed by all sources) have been built in rural areas. In terms of the average area of available apartment space per dweller, the countryside has now surpassed the city. Practically all rural homes have electricity and 65 percent of the apartments are supplied with gas. The number of apartments with communal amenities is increasing. There has been a significant increase in the share of apartments in the rural socialized housing inventory that have running water, sewer lines and central heating. But nonetheless it must be said that we still have many farms and villages that need to be restructured, renovated and refurbished. Many oblasts and republics continue to try to resolve production matters in isolation from social issues, underestimate the significance of the reconstruction and public welfare of the countryside, do not allocate sufficient funds for the construction of housing, cultural and consumer service facilities, and fail to fulfill plans for the activation of housing, schools, kindergartens, clubs and other elements of the social infrastructure. All this ultimately has a negative impact on the retention of cadres, on job attitudes in the social sector, and contributes to the worsening of production indicators. Thus a recent plenum of the Gorkiy CPSU Obkom noted that the quotas for the activation of housing in rural areas had not been met in two years of the five-year plan. During 1981, not a single house was built on 140 oblast farms. The plenum indicated specific measures to remedy the situation.

The decisions of the 26th Party Congress and the May (1982) Plenum of the CPSU Central Committee outlined basic measures for expanding rural housing construction. They called for a significant increase in the volume of construction and for improved amenities in housing. Under the 11th Five-year Plan, a total of 176 million m² of general housing space will be put into operation in rural areas; under the 12th--202-208 million m². The projected scale of housing construction in the 1980's will make it possible to improve housing conditions for one-fourth of the rural families; at the same time, living space per dweller will increase from 13.9 m² in 1980 to 16.3 m² in 1990.

Rural dwellers proved to be of one mind on the question of the external appearance of the countryside of tomorrow. They are in favor of farmstead-type houses that take the specific features of rural life into account while at the same time offering urban conveniences. There are numerous farms on which there are vacant apartments in two- and three-story, multi-apartment buildings that were built not so long ago on the central farmsteads of kolkhozes and sovkhozes. Taking the needs of rural dwellers into account, farmsteads with outbuildings for livestock, poultry and privately owned vehicles most comprise at least 80 percent of the housing space that is put into operation in the countryside. To be sure, single-story construction per m² is significantly more expensive than the construction of sectional multiple-apartment dwellings. But we must be reconciled to this because farmstead-type construction corresponds to the needs and taste of rural workers and to the policy of all-round development of personal household plots so important for the successful resolution of the food problem.

There will also be changes in the structure of financing of housing construction in the countryside. In recent years, there has been an absolute and relative increase in the volume of state and kolkhoz construction in rural areas and cooperative housing construction has begun to develop. At the same time, the scale and share of private housing construction by blue collar workers, white collar workers and kolkhoz farmers have declined. Thus the share of state and cooperative housing construction in rural areas increased and comprised 46 percent in 1976-1980 compared with 29 percent in 1966-1970. During the same period, there was an almost twofold increase in housing construction by kolkhozes; today they finance the construction of almost one-sixth of the housing that is put into operation in the countryside. The volume of private housing construction during the last three five-year plans declined by 59 million m² and comprised 58.5 million m² in 1976-1980. The tendency for public (state and kolkhoz) funds to play a larger part in rural housing construction will continue in the forthcoming decade.

This means a new step forward in the elimination of differences in the realization of the constitutional right of Soviet citizens to housing in town and country, where the majority of the population lives in public housing and pays less than one-third of the housing operating costs.

The improvement of the system of resettlement is a necessary prerequisite to improving housing conditions and the entire complex of living conditions in the countryside. In the course of this work, it is necessary to eliminate the disparity between large-scale, mechanized agricultural production and the system of small rural settlements that has formed in the course of

history. Today more than 60 percent of the rural population centers are settlements with fewer than 100 inhabitants. In such settlements it is extremely difficult to provide the necessary complex of public cultural and consumer services.

The construction of experimental and demonstration-type villages--unique models of mass construction--began in the 1960's. Today, all republics and regions in the nation have amassed experience in the construction of new villages and in the reconstruction of old ones. This experience has shown how important it is to conduct this work on a planned basis. The Master Plan for the Resettlement of the Rural Population, elaborated in accordance with the Master Plan for the Distribution of the Productive Forces and the Master Plan for the Development of Road-Transport Communications, must become the basis for the reconstruction of rural settlements. Naturally, such radical reconstruction of rural resettlement is an extended process. Therefore in the process of implementing the plan for the reconstruction of the countryside and in the process of building and refurbishing central farmsteads, we must not forget the needs of the so-called dead-end villages. It is also necessary to take measures to improve their living conditions. For example, the "Rassvet" Sovkhoz in the Dmitrovskiy Rayon of Moscow Oblast has devised a scheme for intrafarm planning that calls for the refurbishment of 27 out of the 31 villages presently in existence.

Planned and consistent change in the system of rural resettlement permits the more rational development of the system of general education and the public preschool education of the children of rural working people. In the last 15 years, general education schools with 12.8 million pupils' places have been built in rural areas thereby making it possible to complete the transition to the universal secondary education of rural youth. The rural system for the public education of preschool age children is also undergoing ever greater development.

The 11th Five-Year Plan calls for the construction of additional rural general education schools with 2.3 million pupils' places and additional preschool institutions with 1.2 million places. The rate of their construction will intensify under the 12th Five-Year Plan. But at the same time that we are building new schools at a rapid rate, we must not prematurely curb the lower level network of rural schools in small and medium-size settlements that have not yet lost their economic significance.

There have also been notable changes in cultural construction in the countryside in recent years. At the present time, on the average there are two club-type institutions and two nonmobile film projection units for every farm. What is more, there are 8000 mobile film projection units in operation in rural areas. The network of mass libraries is expanding and their inventory of books is increasing. Every other villager uses the library; rural families are also active subscribers to newspapers and journals.

The Food Program devotes much attention to the further improvement of the medical care of rural dwellers and to bringing the level of rural medical care closer to the urban level. In the last 15 years, the capacity of central rayon hospitals--the basic link in the rural health care system--

nearly doubled. At the present time, physicians in rural areas provide medical care in 10-15 specialties. Taking into account the use of urban medical institutions by the rural population, the number of physicians per 10,000 rural population increased by 73 percent between 1965 and 1980 (the increase was by 40 percent in the city), while the number of hospital beds increased by 47 percent (the increase was by 18 percent in the city). Nonetheless the hospital bed to population ratio in the countryside today is at the same level as in the city in 1970 and the physician to population ratio is almost one-half of the urban level.

Accordingly the Food Program calls for the considerable expansion of the network of outpatient and polyclinic institutions in rural areas under the 11th and 12th Five-Year Plans, for a better physician to population ratio, for the improved supply of modern medical equipment and medicinal preparations. Mobile types of medical care will undergo intensive development and it will be a more common practice for specialists of urban health care institutions to treat rural dwellers and for highly qualified specialists to provide consultation services in the field. The organization of the emergency medical care service in rural areas should be complete by 1985.

Measures are presently being taken to retain medical cadres in the countryside and to create the necessary material, housing and consumer service conditions for them. A significant part in the realization of this task will be played by the introduction of payments for rural medical personnel striving to improve health care indicators and to reduce the morbidity in the work force and by the introduction of year-end bonuses from the material incentive fund of agricultural enterprises in accordance with the decree of the CPSU Central Committee and the USSR Council of Ministers "On Additional Measures to Improve the Population's Health Care."

The construction of roads and the development of bus traffic is a vitally important part of the complex of measures indicated in the Food Program. The creation of a developed network of transport communications makes it possible to give rural dwellers easier access to centers of cultural, medical, trade, and consumer services and to jobs, and also makes it possible to reduce the losses that kolkhozes and sovkhozes sustain from impassable roads. Economists estimate that bad roads raise transport costs in the prime cost of agricultural production as high as 40-45 percent and that farms in regions with unsatisfactory roads lose millions of rubles every year.

At the present time, the state allocates substantial sums for roads. But the kolkhozes themselves can and should participate in improving the infrastructure of their own areas. They have the experience of actively participating in roadbuilding and road maintenance.

The year 1983 is decisive for the entire 11th Five-Year Plan. Therefore at the 18 April 1983 conference of first secretaries of central committees of communist parties of union republics, party kraykoms and obkoms, Comrade Yu. V. Andropov called attention to the need for a high degree of organization and for the mobilization of the working people to fulfill the indicated plans. "The main thing that must be done this year," he emphasized, "is

to obtain the planned harvest of grain, fodder, technical and other agricultural crops and to reinforce the positive changes that are observed in animal husbandry." In this regard, the most important task is to alter the psychology of rural people, to see to it that there are fewer references to the weather and to so-called objective factors and that there is more order on the land, more concern for people, and more zealous use of all resources.

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LABOR

POTENTIAL FOR INDUSTRIAL LABOR PRODUCTIVITY GROWTH ASSESSED

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[Article by Doctor of Economic Sciences N. Safronov and Candidates of Economic Sciences Ya. Shagalov and A. Shirov: "Potential for Labor Production Growth in USSR Industry"]

[Text] As we know, our industry has long been distinguished by a high growth rate of labor productivity: It was 5.8 percent a year on the average between 1950 and 1980, but it dropped perceptibly during the 10th Five-Year Plan and first years of the 11th. Speaking at the June (1983) CPSU Central Committee Plenum, General Secretary Yu. V. Andropov of the party Central Committee said that the dramatic augmentation of labor productivity was the cardinal objective in the economic sphere and that we should strive for the highest world level. As yet, however, we cannot be satisfied with the growth rate.

There are several objective and subjective reasons for this. The main ones include the substantial increase in expenditures due to the development of the country's northern and eastern regions, the increasingly negative geological conditions in extractive branches, the increasing difficulties in the provision of several processing branches with agricultural raw materials and so forth. But the main problem is that the potential for labor productivity growth is not being utilized in full, and this is primarily a result of imperfections in the present methods of economic management and production control. Although extensive factors of economic growth have been largely depleted, many administrators are still focusing on them, and this is naturally impeding the transfer of the economy to primarily intensive channels of development.

What is this potential? In the most general terms, it can be described as the ability to reduce labor expenditures per unit of product or per operation, which can be done through the more efficient use of material, technical, financial, labor and other resources. This potential must be utilized directly in the production sphere, but on the decisionmaking level it is subdivided into intraorganizational, sectorial and national economic potential.

Material and Technical Potential

In the developed socialist society the deciding role in the augmentation of labor productivity is assigned to the improvement of the material and technical

base of production and the maximal use of scientific and technical achievements, mainly taking the form of new fixed assets and better tools of labor. According to the data of the USSR TsSU [Central Statistical Administration], the higher output per worker at enterprises which began operating during the 10th Five-Year Plan produced a savings equivalent to the labor of more than 3 million people.

The opportunities afforded by technical progress are not being used in their entirety, however, in the majority of industrial branches, associations and enterprises. As speakers pointed out at the 26th CPSU Congress and the November (1982) CPSU Central Committee Plenum, capital investments are still being scattered among numerous projects, there are too many delays in the incorporation of new production capacities, plans for the incorporation of new equipment and advanced technology are still not being fulfilled and there are delays in the production of new items which are ultimately new only in terms of the date of their manufacture, and not in terms of technical and economic parameters. But there have also been examples to the contrary. The special instrument and technological equipment plant of the Rostsel'mash Production Association took 26 months to build instead of the scheduled 27. This saved 67,000 rubles. The plant reached its projected capacity within 17 months (as compared to the standard 18), and this produced an additional output worth 120,000 rubles.

The more efficient use of capital investments affords considerable opportunities for labor productivity growth. This means that the quality of estimates and technological documentation must be improved and plans for construction and installation operational volumes must be coordinated with plans for the development of the capacities of construction organizations, material and technical supply operations and equipment deliveries. According to USSR Gosstroy, shortages of material resources account for 28 percent of all delays in the completion of projects, the failure to coordinate work schedules with the capacities of construction organizations accounts for 25 percent and late deliveries of equipment account for 15 percent. The design and construction of new enterprises can take 8-10 years. As a result, they are often technically obsolete as soon as they open.

When we examine the potential for labor productivity growth in connection with the investment process, we should bear in mind that it is still primarily of an extensive nature, which leads to the creation of new jobs in some parts of the country with a manpower shortage. More than a million of these were created just during the 10th Five-Year Plan.

Of course, this has several inevitable negative results. In 1979, for example, the industrywide level of production capacity use was 80 percent, as compared to 91.5 percent in 1975. In many cases, the priority loading of the most highly productive machines and production units cannot be guaranteed. The situation is particularly unsatisfactory in the case of complex special equipment for electrophysical and electrochemical processing and machine tools with digital programmed control, which are three to four times as productive as the conventional universal lathe. A survey conducted by USSR organs of people's control indicated that 3,000 of the 8,300 machine tools of this type inspected on that day at enterprises of the ministries of heavy and transport machine

building, the electrical equipment industry and the machine tool and tool building industry were not being used at all, and the rest were being used 8 hours a day, but conventional universal lathes were being used 9.5 hours a day.

What are the implications of the tendency toward extensive development in the sphere of capital investment? This means that most of the new equipment is used for the expansion of the production system and only 25 percent is used for the replacement of old equipment. But since the actual rate at which outdated equipment is written off is 2.4-2.5 percent a year--that is, far below the optimal rate, which should be, according to the State Committee of the USSR for Science and Technology, 5.6 percent a year--fixed capital has grown increasingly outdated in recent years. In industry as a whole, 15 percent of the equipment is more than 20 years old, and in machine building the figure is 25 percent. But after all, the use of large quantities of worn and obsolete equipment not only lowers the technical and economic indicators of industrial production but also requires additional funds and labor resources for its maintenance in working condition. According to the data of the USSR TsSU, 3.9 million of the people working at industrial enterprises are engaged directly in major equipment repairs.

To neutralize the negative effects of a situation in which the number of jobs does not correspond to the supply of labor and to the operation of obsolete equipment, several traditional beliefs must be revised and several traditional organizational and economic solutions must be discarded. In particular, this applies to ideas about the distribution of capital investments between new construction and the enlargement of existing production units on the one hand and remodeling and retooling on the other. The current ratio must be changed soon in favor of the latter. Furthermore, the creation of new jobs must be coordinated directly with plans for freeing workers in existing production units. Apparently, production workers and builders must be provided with more effective financial incentives for remodeling work, and a technical base must be prepared for the mechanization of construction and installation work that has to be performed in cramped and uncomfortable quarters. It is possible that fundamentally new technology will be required for remodeling work.

Furthermore, we feel that labor and material resources and manufacturing processes must be redistributed as quickly as possible in favor of enterprises and production units with the highest technical and organizational standards in order to secure their uninterrupted operation and a fuller workload. This will provide an opportunity to close down some outdated production units and units operating at a loss (but certainly with a view to socioeconomic limitations) and to use others as reserve capacities, which can be remodeled and retooled without haste or losses.

Within the near future, it will also be necessary to convert all equipment at enterprises and production units with intermittent technological processes to the more efficient two-shift operational schedule and simultaneously get rid of the machines and equipment (particularly the worn and obsolete units) with an operational underload. Of course, this will call for the simultaneous institution of multiple-machine operation on a broader scale, the combination

of occupations and functions, the accelerated mechanization of auxiliary operations and the transfer of the freed workers to the main production areas. Positive experience in this area has been accumulated at machine-building enterprises in Leningrad, where the shift coefficient rose from 1.29 to 1.5 during the last five-year plan. All highly productive equipment here is now operating on the two-shift schedule. The shift coefficient is 1.9 for mechanized flowlines, 2 for automated lines, 1.77 for foundry equipment and 2.78 for forging and pressing machines, which are used in three shifts. This can reduce existing stocks of equipment and simultaneously improve their age and technological structure. This, in turn, will produce a significant savings because it will increase the load of new, more productive equipment, reduce the number of repair personnel and lower repair and maintenance costs. Other equally important results will be the quicker renewal of fixed capital and the clearing of some production areas. This will allow for the creation of sectorial and regional equipment reserves.

Much is being done to improve the operational load of equipment in the Sumy Machine-Building Production Association imeni Frunze. When plan fulfillment by production divisions and shops is being assessed, the actual use of production capacities is calculated. As a result, all of the main equipment now operates in two shifts. The use coefficient of equipment in the best divisions has been raised to 98 percent of the standard limit. During the 10th Five-Year Plan alone, the augmentation of the equipment load increased output by an amount that would have required 11.4 million rubles in capital investments in the incorporation of new capacities.

The quicker incorporation of new production capacities would also be quite effective. In recent years, two-thirds of the new industrial facilities have not reached their basic projected technical and economic indicators on schedule, including indicators of production volume and labor productivity. In connection with this, more than a third of the most modern fixed capital acquired in the last 3 years is operating at around 50 percent of its capacity in industry. If the amount of time required for the incorporation of new capacities could be reduced by just 1 year, the additional industrial output would be worth 30-35 billion rubles, which would be equivalent to a decrease of 1.8-2 million people in labor requirements.

There are several reasons for this. The main ones are unfinished construction operations, design errors, equipment defects, shortcomings in the organization of production and labor and a shortage of skilled manpower, crude resources, materials, electric power and other resources. Another negative factor is the absence of detailed plans for the organization of production, labor and management in line with technical and technological designs in the majority of projects.

The quicker incorporation of new capacities will require the planning and implementation of an entire group of measures to heighten the validity of plans, coordinate construction schedules and supply new and remodeled facilities with all types of resources and qualified manpower. Builders must take more responsibility for, and greater interest in, the completion of projects on schedule in line with all designs, guaranteeing their organizational

integrity. To this end, we feel that the drafting of plans for the organization of production, labor and management should be made compulsory within the next few years for all new, enlarged and remodeled enterprises and that they should be scheduled to begin upon the completion of the construction or remodeling work.

Finally, the time has come to put an end to the wrongful practice of accepting unfinished construction and structures with design defects from builders. This will require the assignment of greater responsibility to builders and the members of state acceptance commissions and the enhancement of the financial interest of designers, builders, production workers and commission members in the attainment of all projected technical and economic indicators on schedule or ahead of schedule in new and remodeled facilities. In particular, we feel that bonuses should be paid to builders and members of state acceptance commissions only a year after the facilities have begun operating and only if technical and economic indicators conform to the standard levels for the end of the first year of operations.

When we examine the potential connected with the mechanization of manual labor and, in particular, heavy physical labor and unappealing work, we must remember that the reduction of manual labor does more than just secure an increase in output at existing enterprises with the same or lower numbers of workers. It is also of tremendous social significance because it makes work more meaningful and creative and puts workers in a higher skill category.

The experiments with comprehensive special programs for the reduction of manual labor in some parts of the country testify that this could be conducted more intensively in our industry so that the process could essentially be completed within the next 10-15 years. The fact that this is a realistic objective is attested to by the experience of the Latvian SSR, which has been given extensive coverage in this magazine. Here programs for the mechanization of manual and heavy physical labor during the 10th Five-Year Plan resulted in the comprehensive mechanization and automation of more than 500 shops and divisions and the installation of over 1,000 conveyor belts and flowlines, which relieved 18,000 people of the need to perform heavy physical labor and raised the mechanization indicator considerably. The current five-year-plan objective to free 1.2 million people from manual operations should be regarded as the minimum, because this will have only a negligible effect on the present dynamics of manual labor reduction (approximately from 0.5 to 0.6 percent a year).

Much has been accomplished in this area in the Ufa Motor-Building Production Association. Mechanized warehouses for various materials, semimanufactured items, equipment and finished products were opened here during the 10th Five-Year Plan, producing a savings of around 500,000 rubles and centralizing 70 percent of the materials handling operations. The total economic impact was 799,000 rubles, and 492 auxiliary workers were freed to work in other areas.

Each year the association acquires more than 1,500 small pieces of mechanized equipment, simplifying the labor of hundreds of workers. All of this has mechanized auxiliary operations to a considerable extent. A comprehensive

long-range plan has been drafted for the association, envisaging the establishment of mechanized warehouses with programmed control, the continued incorporation of centralized intershop transport and the centralized collection, processing and shipment of scrap metal and several other measures which will mechanize the labor of up to 55 percent of all auxiliary workers by the end of 1985.

We feel that the special comprehensive program for the reduction of manual labor should be an integral part of the state plan for economic and social development. Furthermore, ministries and departments should ensure the total coordination of these assignments with the volume and assortment of mechanization equipment to be manufactured, with a view to plans for the development of the production capacities needed for their centralized manufacture. Besides this, enterprises must make a maximum effort to mobilize all potential for the manufacture of this equipment for their own needs, including the provision of financial incentives to those engaged directly in the design and development of equipment for the mechanization of manual labor with a view to the numbers of actually freed workers.

Finally, another important element of potential is the continuously rising level of production concentration and specialization in industry. At the beginning of the last five-year plan, 49 percent of all industrial enterprises had less than 200 personnel. Labor productivity here was approximately one-third as high as at large enterprises. The most important reasons for this are the inefficient specialization of small enterprises, which generally manufacture a large variety of items, and their much lower level of technical organization.

In general, shortcomings in specialization are typical of the majority of industrial enterprises, both in basic and in auxiliary production units. According to a special survey conducted by USSR TsSU, 71 out of 100 machine-building plants now produce cast iron for their own needs, 27 produce the cast steel they need, 84 produce forged pieces, 76 produce stampings and 67 produce hardware. According to calculations, if the centralized production of items used in machine building were to reach the optimal level, which, according to the data of institutes of the USSR Academy of Sciences, is 85 percent, labor productivity would increase around 1.5-fold in machine building. But virtually all industrial enterprises have the complete set of auxiliary services, and these are often extremely small and inefficient. This is why the further development of production associations is of special importance. Unfortunately, formal tendencies have not been overcome in this sphere as yet. Associations are often created without the necessary organizational and technological rearrangement of production at the enterprises making them up.

Other problems are the lack of interdepartmental contact and the insufficient interest on the part of ministries, industrial and production associations and enterprises in the centralization of similar types of production and in closer cooperation. Despite the great opportunities to economize on labor by creating regional intersectorial associations, this potential has remained virtually unutilized. Local labor agencies could play a special role in this process, but this will necessitate the clarification of their rights and obligations and the forms and methods of their work.

Organizational Potential

Labor productivity is to rise 7.8 percent as a result of the scientific organization of labor during the current five-year plan (6.3 percent in the last one). The total rise in labor productivity due to factors connected with the scientific organization of labor will be around 34 percent. This will increase the number of hypothetically freed workers from 1,988,700 people in the 10th Five-Year Plan to 2,995,600 people in the 11th. Since several ministries have set plan assignments much lower than the control figures of USSR Gosplan and the State Committee for Labor and Social Problems, however, the plan for the incorporation of the scientific organization of labor in industry as a whole has been lowered considerably: The economic impact of the incorporation of the scientific organization of labor has been projected at 2.8 billion rubles, as compared to the 3.5 billion rubles of actual savings in the last five-year plan. In the plan for 1981 the economic impact of this was less than 70 percent of the 1980 figure. And what happened? Even despite the fact that many ministries underfulfilled state plan assignments for the incorporation of the most important measures, the impact was 44 percent greater than the planned sum.

One of the main reasons for the lower plans is the absence of standards for setting branch assignments for the volume and impact of the most significant elements of the scientific organization of labor. The Scientific Research Institute of Labor has now worked out these standards and their use will heighten the validity of plans considerably.

Great potential for labor productivity growth is connected with previous failures to make full use of the brigade organization of labor. According to the data of a special survey conducted by the USSR TsSU, the correct organization of labor in brigades heightens productivity by an average of 5-10 percent a year, although labor productivity growth in new brigades in a number of branches in 1981 was 3-6 percent (the Ministry of Machine Building for Light and Food Industry and Household Appliances, USSR Ministry of Power and Electrification and Ministry of Power Machine Building), and in industry as a whole it rose only 1.7 percent in collectives of this type, as compared to the 2.8 percent stipulated in the plan. This occurred as a result of the emphasis on the formation of new brigades and their enlargement rather than on the use of all opportunities to heighten the effectiveness of labor, even in existing primary labor collectives. The number of workers in brigades rose 26 percent between August 1980 and December 1981 and amounted to 52 percent of all industrial production workers. In most branches, however, the preparation of the necessary conditions for highly productive labor was not given enough attention.

In spite of the fact that half of all production workers in industry are working in auxiliary units, workers in basic units account for most of the rise in the number of brigade members. Past experience testifies, however, that this progressive form is highly effective in the sphere of production services. For example, at the seven plants of the Ministry of Tractor and Agricultural Machine Building where 60-98 percent of the workers on the monitoring staff were united in brigades, the productivity of the monitors' labor rose 8-12 percent and their rate of turnover decreased by 15 percent.

Therefore, despite good quantitative indicators, the brigade form of labor organization is still not the prevailing form. This is why attention should be focused during the remaining years of the 11th Five-Year Plan on the reorganization of all of the work of enterprises, shops and production divisions in accordance with the main principles of the brigade form of labor organization, so that the operational efficiency of all existing primary collectives can be enhanced considerably, regardless of the date of their creation.

In recent years much has been done in the standardization of procedures for the development of the brigade organization of labor, particularly on the intersectorial level. Nevertheless, enterprises still need sectorial procedural and normative materials. They need them for the qualified choice of the most efficient brigade form, size and professional-skills composition, with a view to the sectorial features of production.

The operational efficiency of brigades can be enhanced considerably only if all of the work at enterprises is reorganized in this manner. This presupposes the complete reorganization of the entire system of production management and organization and an emphasis on final results in primary collectives. In particular, this will require the compilation and implementation, in conjunction with engineering and economic services, of plans of labor organization and incentives for each existing and new brigade; the extensive use of the most progressive methods of work in primary collectives, particularly the combination of professions and functions and multiple-machine operation and maintenance; the improvement of operational planning and production control for the coordination of the activities of all brigades in production divisions and shops; the improvement of labor standards and the institution of technically substantiated norms; the improvement of the organization and maintenance of brigade work positions; the establishment of the necessary conditions for more extensive and intensive cost accounting in primary collectives. It will be extremely important to organize the training of workers in second and third professions and in progressive work methods and procedures, and the training of administrators, engineering and technical personnel and foremen in managerial techniques corresponding to the brigade form of labor organization; to ensure collective and individual interest in the final results of labor with a view to the specific features of production; to improve forms of individual and brigade socialist competition. The experience of leading enterprises testifies that the effectiveness of brigade labor can be enhanced precisely by means of this kind of intensive and comprehensive work.

Another type of potential is connected with further improvements in the organization of auxiliary labor. Numerous studies have shown that around two-thirds of all intrashift losses of work time are due to shortcomings in production services. Furthermore, these losses are usually much greater in auxiliary units than in basic ones. They can be reduced through the institution of regular services, scheduled in line with the experience of leading enterprises--the Volga Motor Vehicle Plant, the Gorkiy Aviation Plant imeni S. Ordzhonikidze and several others.

In 1981 assignments for the institution of regular maintenance systems at the enterprises of nine ministries were included for the first time in plans for

the scientific organization of labor. The systems actually covered 93,000 workers at enterprises in 18 branches and the number of conditionally freed workers was 2,800. The low level of incorporation and the low impact were due, first of all, to the complexity of this work and, secondly, to the absence of the necessary methods, because the regulation of service and maintenance generally requires the resolution of problems in the organization of production, planning and technology in addition to problems in labor organization, standards and incentives. Therefore, we feel that these systems should be incorporated on the basis of comprehensive organizational and technical plans.

Assignments for scientific research in the area of the scientific organization of labor during the current five-year plan envisage the development of sectorial systems for their future incorporation at enterprises. They also call for research on a broader scale and on a higher level, the enlistment of the services of sectorial technological institutes and computer centers for this research and the preparation of intersectorial and sectorial standards covering the basic functions of regular service and maintenance systems, including technological, organizational and technical regulations, standard designs, the monitoring, collection and processing of information about the state of facilities, standard structures of functional services, working algorithms and computer programs for the tabulation of services and the work of service personnel.

It would also be expedient to work out procedures and instructions for the coordination of standards with the specific conditions of production at existing and planned enterprises and for the choice of optimal types and systems of regular service. According to our calculations, these standards and procedural materials could ensure labor productivity growth by reducing equipment idle time, minimizing losses of work time in basic units and cutting the number of auxiliary personnel to 8-10 percent.

We have the right to expect a substantial impact from the correct observance of the requirements of the scientific organization of labor in plans for enterprises, technological processes and equipment. Its absence generally leads to the slower incorporation of new and remodeled facilities, the insufficient introduction of progressive forms and methods of work and relatively low labor productivity at new enterprises. Although intersectorial requirements and standards for the scientific organization of labor were issued during the last five-year plan for compulsory inclusion in designs, the majority are still not being taken into account. Without denigrating the significance of design quality control by labor agencies and sectorial ministries, we must admit that the mere existence of these requirements cannot guarantee their complete observance.

This means that we now need the kind of project planning methods that will motivate each planner at each level and stage of planning to make choices meeting all economic and social criteria of effectiveness. The actual correspondence of project plans to the requirements of the scientific organization of labor can be secured if these requirements are clearly stipulated in project planning assignments, if project planning and design organizations are issued procedural materials on the validation of planning decisions, if designers,

project planners and technologists master progressive methods of project planning and the substantiation of decisions and, finally, if the evaluation of plans from the standpoint of their correspondence to the requirements of the scientific organization of labor is conducted according to a single set of methods. Obviously, the methods of project planning and of choosing optimal decisions with maximum correspondence to the requirements of the scientific organization of labor should be a compulsory part of the training programs of project planners and designers.

We also feel that project plans should be used as a basis for setting higher technical and economic indicators of labor productivity, product quality and overhead costs than those attained at existing enterprises, even those that are the most progressive and are operating most effectively. Besides this, before the project plan is approved, its social significance should be judged by a sizeable panel of specialists and workers.

Another important element of organizational potential for labor productivity growth is the improvement of norming standards. Although intersectorial and sectorial labor standards can be set for 86 percent of all workers in industry, they had been set for only 65 percent by the end of the first year of the five-year plan. The relative number of time-rate workers with normed labor rose to 70 percent in industry, and in the overwhelming majority of analyzed branches the labor norms were technically sound. In spite of this, losses of work time among auxiliary workers, who constitute the majority of personnel paid at an hourly rate, are several times greater, according to numerous surveys, than the losses of workers in basic units, testifying to defects in existing standards. Nevertheless, the increase in labor productivity as a result of the revision of norms for time-rate workers in industry was only 0.3 percent in 1981.

Shortcomings in the setting of norms are one of the main reasons for the quicker growth of this category of workers. Between 1977 and 1981, for example, the proportion accounted for by piece-rate workers in industry as a whole increased by 0.6 percent, while that of time-rate workers increased by 2.3 percent. Furthermore, auxiliary workers accounted for the entire increase: Between 1977 and 1981 their number rose by 5.7 percent while the number of workers in basic units decreased by 1 percent.

What is the reason for the poorer quality of norms? It is not only that they are relatively "aged," as many have said, but also an entire set of other reasons. They include the practice of assessing the quality of norms primarily with the aid of data on the level of their fulfillment without consideration for the actual use of work time and the insufficient financial interest of managers and engineering and technical personnel in the institution of thoroughly sound norms and in the timely and efficient revision of outdated ones.

The use of technically sound norms, their stronger validation and the timely and complete inclusion of all changes in organizational and technical conditions in the calculation of norms could, in our opinion, be promoted by a special control system. This would involve regular inspections of the way in which enterprises are carrying out plans for the revision of norms, the correspondence of existing norms to the level at which they can be regarded as

technically sound and the accuracy with which intersectorial, sectorial and other progressive norms are being employed.

An important condition for higher norming standards at enterprises consists in the timely revision of existing intersectorial and sectorial norms and the provision of information to enterprises about outdated norming procedures. Above all, the revision of norms for time-rate workers, especially auxiliary personnel, must be carried out more quickly. It is extremely important to set norms for brigades with a view to the reduction of preparatory and completion operations, the more efficient distribution of work and functions among brigade members, the development of multiple-machine maintenance and so forth.

Socialist competition and the extensive use of the experience of production leaders can speed up labor productivity growth. The experience of many labor collectives testifies that this can mobilize a great deal of potential. As yet, however, the formal attitude to this important matter has not been overcome at many enterprises. The initiatives of outstanding workers and labor collectives are often not supported by the administration or are implemented on a broad scale without any preliminary analytical, economic and explanatory work and without organizational and engineering support. We are not making full use of the opportunities afforded by interrelated plans which reveal labor productivity growth potential in work positions, production divisions and shops. In some cases the formal approach to the organization of socialist competition is connected with shortcomings in moral and financial incentives for participants. All of this diminishes the economic and social impact of competition.

Considerable experience in the enhancement of efficiency has been accumulated in various branches of industry. For example, at the Volga Motor Vehicle Plant and the Rybinsk Motor-Building Production Association, this work is based on the comprehensive improvement of the organization of production, labor and management; at the Sumy Machine-Building Plant imeni M. V. Frunze the use of fixed productive assets is being improved for the same purpose and workers are being encouraged to take the initiative in the revision of norms and the expansion of service zones, in line with the experience of the Aksay Plastic Plant and the Polotsk Polimir Production Association imeni 50-Letiya BSSR and in line with the Shchekino experiment in the use of incentives for the performance of assigned work by fewer workers. The brigade form of labor organization and incentives is being instituted on a broad scale in line with the experience of the Kaluga Turbine Plant, the Tatneft' Association, the Kupavin Fine Fabric Mill and others. But the adoption and effective use of the most progressive experience are still taking too long. We can expect the work to speed up considerably after the creation of the all-union intersectorial system for the collection and dissemination of information about this experience. This would also be promoted by the development of the positive experience in the payment of bonuses to enterprise and organization collectives with the most impressive results in the incorporation of the scientific organization of labor and progressive experience, initiated by the AUCCTU.

The present stage in the development of socialist competition is distinguished by the great diversity of the forms and methods of this competition.

Nevertheless, there are several extremely promising forms which have not received the kind of recognition we feel they warrant. In particular, this applies to the public associations of workers and engineers and the development of competition between them. In connection with this, we should study the experience of the Kaluga Turbine Plant, the Kishinev Artificial Fur and Rubber Goods Combine and several other enterprises in the organization of creative associations joined on a voluntary basis by individual workers or production brigades and engineers. For example, more than 172 such brigades are now working successfully at the Kaluga Turbine Plant. In just 1 year they lowered the labor requirements of production by 100,000 standard hours and produced a savings of 500,000 rubles.

It seems to us that the time has come to define the status of these brigades. At present no such document exists, with the exception of statutes drawn up at individual enterprises. Their operational efficiency could be enhanced by the organization of an all-union socialist competition for these brigades and the institution of special bonuses.

Finally, there is another form of potential. At a time of scientific and technical progress, labor productivity depends largely on the level of personnel training and the degree to which labor skills are used. According to specialists, the tendency of the average labor category to lag behind the average output norm reduces labor productivity at enterprises by 4-5 percent. In addition, not enough bonuses are paid for professional artistry and the combination of professions and functions, as a result of which some of the workers who are trained in second and third professions do not use the skills they have mastered. Workers who actually perform a combination of jobs and functions account for only 5 percent of all workers in industry. According to sample surveys at enterprises in Leningrad, however, up to 60-70 percent of the skilled workers have mastered second and third professions, particularly in machine building. According to several economists, the broader use of this progressive form of labor would raise labor productivity in industry by 2-4 percent. The experience of the Volga Motor Vehicle Plant, the Lyubertay Carpeting Production Association and other enterprises testifies to the high impact of the provision of incentives for professional artistry with a view to the results of competition.

The experience in the organization of socialist competition "For the Attainment of Assigned Annual Indicators Within the System of Intraoccupational Advancement" in the Lyubertay Carpeting Association deserves consideration. Awards are given to workers with high production indicators in their seniority and occupation groups and skill categories in conjunction with the simultaneous payment of differentiated bonuses depending on the worker's grade and length of service. The use of this form of competition on a broad scale has raised labor productivity considerably, improved product quality and reduced personnel turnover.

Therefore, the disclosure and use of potential for labor productivity growth presupposes an examination of all of the material, technical, organization and social factors contributing to this growth. This article has concentrated mainly on the first two groups. In addition, substantial labor savings can

also result from the more efficient use of the human factor, particularly the improvement of working conditions, the reduction of unproductive expenditures of work time, the reduction of personnel turnover, etc.

In his article on "The Teachings of Karl Marx and Some Aspects of Socialist Construction in the USSR," General Secretary of the CPSU Central Committee Yu. V. Andropov said: "Marx' fundamental belief that the accelerated progress of productive forces requires the appropriate forms of economic organization can be repeated over and over again, but nothing will be accomplished until this theoretical fact is translated into the language of action. Today it is essential to carefully consider and consistently implement measures which can give greater operational scope to the colossal constructive forces inherent in our economy."* Above all, this applies to the potential for higher labor productivity--the chief indicator of economic effectiveness.

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LABOR

SAMPLE CURRICULUM OF COURSE IN AGRICULTURAL COLLECTIVE CONTRACTS OUTLINED

Moscow EKONOMICHESKAYA GAZETA in Russian No 38, Sep 83 pp 11-14

[Article: "Collective Contracts in Agriculture"]

[Text] The expediency of including special subjects, and perhaps even courses, in the curriculum of the economic educational system to raise the level of the scientific and technical knowledge of workers, specialists and managerial personnel and to institute the study of advanced experience on a much broader scale was pointed out at the June (1983) CPSU Central Committee Plenum. In line with this, a course in "The Collective Contract in Agriculture" will be offered during the 1983/84 academic year. It is recommended for schools of communist labor and schools of applied economics on kolkhozes and sovkhoses and at other state agricultural enterprises. The curriculum extends over the entire academic year.

The first class in all forms of economic education will begin with the subject "The Creative Initiative and High Awareness, Discipline and Order of the Soviet People--A Guarantee of the Successful Fulfillment of the Plan for 1983 and the Five-Year Plan as a Whole" (a sample lesson plan was published in issue 34 of EKONOMICHESKAYA GAZETA). During this class, the progress of auditors and labor teams in the fulfillment of plan assignments and socialist commitments for 1983 and the five-year plan as a whole should be examined, and ways of heightening the effectiveness of work in the team and reinforcing discipline and order in line with the decree of the CPSU Central Committee, USSR Council of Ministers and AUCCTU "On More Intense Work To Reinforce the Socialist Discipline of Labor" should be discussed.

The content of the course should be varied to conform to the group of auditors. In schools of communist labor, for example, the course should concentrate on the study of the work experience of the best contracted subdivisions and the use of this experience in the auditors' own collectives. In schools of applied economics it would be expedient to direct the auditors' attention to preparations for the organization of new contracted subdivisions, the analysis and summarization of accumulated experience and the determination of ways to heighten the effectiveness of the brigade contract.

Laboratory work plays a special role in heightening the practical value and effectiveness of education. During lab sessions, auditors should analyze the

economic activity in a working position (or in a collective) with the aid of a propagandist, compile personal (or brigade) plans for the augmentation of labor productivity and personal economic accounts and validate socialist commitments.

Sample Curriculum

No	Subject matter	Number of hours		
		Lectures by propagandist, discussion	Laboratory sessions	Total
	Introductory lesson			
	The Creative Initiative and High Awareness, Discipline and Order of the Soviet People--a Guarantee of the Successful Fulfillment of the 1983 Plan and the Five-Year Plan as a Whole	2	--	2
1.	Essence and Basic Principles of Collective Contract	2	--	2
2.	Organization and Evaluation of Performance of Subdivisions on Collective Contract	2	4	6
3.	Wages and Financial Incentives for Collective Contract	2	4	6
4.	Interaction by Labor Teams According to Contract Terms	2	2	4
5.	Indoctrination Work in Labor Teams (Including Talks on Communist Morality)	6	--	6
	Study of new party and government documents, final sessions			6
	Total			32

Laboratory work in the course in "The Collective Contract in Agriculture" should focus on the following subjects:

The content of cost accounting assignments; the evaluation of the performance of contracted subdivisions according to final results (subject 2); the calculation of piece-work rates in farming and animal husbandry; the distribution of the collective wage among members of contracted subdivisions (subject 3); the determination of winners of competition within the contracted subdivision and between brigades and links (subject 5).

In schools of applied economics another laboratory session should concentrate on the experience in the formation of brigades and requirements pertaining to their working conditions.

Economic education councils and the economic services of enterprises should prepare analytical materials describing the work experience of leading self-supporting brigades for these classes and prepare visual aids and sample lesson plans to reveal the potential for the incorporation of the new form of labor organization.

When the subject of study is "Indoctrination Work in Labor Teams," discussions should be held on questions of communist morality and indoctrinational work in contracted subdivisions. As speakers stressed at the June (1983) CPSU Central Committee Plenum, the development of the new individual is not only the main goal of communist construction but is also an essential condition for it. The system of propaganda and indoctrination should be aimed directly at the development of a new type of economic thought, emphasizing initiative and socialist enterprise, heightened responsibility and a creative search for ways of attaining the best possible final national economic results with minimum expenditures. This should also be the purpose of the course in "The Collective Contract in Agriculture."

To assist propagandists and auditors of schools of communist labor and applied economics and economic seminars, *EKONOMICHESKAYA GAZETA* will regularly publish information about teaching methods in recommended courses. An academic outline of the course in "The Collective Contract in Agriculture" is printed below. Procedural materials to assist students in this course will be published in the newspaper throughout the academic year.

Basic Principles of the Collective Contract

In March of this year the CPSU Central Committee Politburo considered more intensive organizational work to introduce the collective contract in kolkhoz and sovkhoz production. It was noted that now that the effective and efficient use of land, equipment, other material resources and capital investments in agriculture is of particular importance, fundamentally new approaches must be taken to the organization of production. The solution to this problem lies in the quicker incorporation of cost accounting on kolkhozes and sovkhozes, the assignment of greater responsibility to personnel for the fuller use of internal potential and the reinforcement of plan, state and labor discipline. The collective contract is an effective way of attaining these objectives.

Experience accumulated in various parts of the country indicates that contracted work teams can attain better final results in agricultural production and the conservation of resources.

The CPSU Central Committee Politburo commended the work experience of kolkhozes, sovkhozes and other state agricultural enterprises in the use of the collective contract.

The Formation of Contracted Subdivisions

Intensive factors of production growth and the efficient use of land and labor resources are acquiring increasing importance in agriculture. The main objective of any farm is a greater return on invested material and financial resources and the successful fulfillment of five-year-plan assignments for agricultural production and procurements.

What is the best way of attaining this objective with minimum expenditures and thereby making a greater contribution to the food program? One way consists in the extensive use of progressive forms and methods of labor organization and incentives and the thorough reinforcement of discipline and cost accounting. The collective contract with the piece-work-plus-bonus system of wages has proved effective in the accomplishment of these tasks.

The economic purpose of the collective contract in agriculture is the assumption of responsibility by a work team—for example, a link or brigade of machine operators—to produce a specific quantity on an assigned plot of land, and the assumption of responsibility by the sovkhos (or kolkhoz) administration to supply the team with the necessary resources on schedule, create the necessary conditions for the successful accomplishment of this work and pay for all products at previously negotiated rates.

This is a special, more highly perfected form of intrafarm cost accounting, based on the mutual economic interest of the client (represented by the sovkhos directors or kolkhoz board) and the contractor (represented by the work team) in the production of a large quantity of products. The collective contract takes the specific features of agricultural labor fully into account and presupposes a transition to forms of material compensation in which the only source of this compensation for each member of the primary team is the final results of joint activity (this applies to both quantitative and qualitative indicators).

The basic principles of the formation and functioning of production subdivisions with a collective contract are the following:

The voluntary formation of labor teams (brigades, detachments or links) and the endowment of these teams with total independence in the fulfillment of production assignments;

The assignment of agricultural equipment, livestock and poultry to contracted subdivisions, generally for a long period of cultivation or harvesting, so as to ensure the maximal employment of the entire team throughout the year if possible;

The compilation of economically sound cost accounting assignments with a view to the previous level of production and progressive standards pertaining to the expenditure of crude resources, materials, fodder, fertilizer and other resources, and the guarantee of reliable bookkeeping;

The payment of wages according to a stable or progressive rate depending on the yield of agricultural crops and the productivity of livestock, and the

payment of bonuses for labor productivity growth, increased output, better product quality and lower overhead costs;

The guaranteed payment of wages in years with a poor harvest, based on fixed rates for all work performed;

An extremely simple and understandable system of incentives for the final output, envisaging a significant percentage of supplementary payments and bonuses in the worker's total wage.

The main requirement is that permanent brigades and links be the central nucleus of the system of contracted collectives on the farm and that their formation be voluntary.

As for the size of the brigade (or link), it will depend on natural and economic conditions, the level of production specialization and concentration and the type of technology and equipment employed.

For example, on farms in Millerovskiy Rayon in Rostov Oblast, where crops and fields are large and where grainfields account for more than 60 percent of all farmland, the most prevalent type is the mechanized link consisting of 9-12 machine operators. The links are assigned planted areas of 1,400-1,800 hectares and a set of the necessary equipment.

In Bashtanskiy Rayon in Nikolayev Oblast the contracted mechanized brigades are larger, consisting of 15-18 or more people and responsible for the crops on an area of 2,500-3,000 hectares.

In Altay Kray, contracted links consist of 5-10 machine operators and brigades (without links) have no more than 15 members.

In regions where labor-intensive crops are raised (flax, cotton, sugar beets and others), specialized brigades and links are created, and their size depends on the specific nature of their operations. For example, in the cotton zone the area assigned to a link can range from 50 to 90 hectares, depending on the topography of the fields, the state of irrigation equipment and the operational load of each tractor-cultivator. Each worker is responsible for 3-4 hectares, and there is one irrigator for each 15-20 hectares.

On sovkhozes and kolkhozes in Kalinin Oblast, fiber flax is cultivated by links consisting of three or four machine operators. On farms in Saratov Oblast the links engaged in the irrigated cultivation of fodder crops and the simultaneous fattening of young cattle consist of five or six machine operators.

The labor teams can include machine maintenance personnel, expert adjusters, manual laborers and others. The composition and size of the team depend on the operational needs of the collective.

Many problems arise in connection with temporary production teams, particularly during spring field work and the harvest season. Experience has shown that

permanent contracted links and brigades engaged in the cultivation of agricultural crops can be combined with temporary work teams. Temporary technological subdivisions (harvesting, sowing and other technological links and brigades) can be created out of permanent brigades and links by including additional equipment and labor resources as needed for periods of more intense work, or they can be created by combining the harvesting equipment of two or three links in a single harvesting and transport complex (or detachment).

Temporary subdivisions should not relieve the members of permanent teams of responsibility for final results.

Brigades, links and detachments are not the only types of self-supporting contracted subdivisions. On the Krasnyy Oktyabr' Kolkhoz in Surkhan-Darya Oblast in Uzbekistan, the collectives responsible for an entire crop work on a contract. In short, contracted subdivisions can differ, but the main requirement is that the team be permanent and that it perform the main operations involved in the cultivation of one or several crops on its assigned territory and be responsible for the final results.

Contracted subdivisions worked successfully on many farms in grain harvesting this year. In Krasnodar Kray and Rostov Oblast, contracted subdivisions (brigades, links and detachments) organized a system of reciprocal quality control. Control threshing operations were conducted and the results were noted in the personal labor account of each team member. This approach to the evaluation of individual performance levels certainly warrants consideration. It can and must be used not only in grain harvesting, but also in other technological operations in farming and animal husbandry.

Many harvesting links on farms in Kazakhstan use the so-called assembly method to eliminate the waiting periods when combines stand idle because there are delays in grain transport and handling operations. In each specific case it is important to stipulate the mutual responsibility and incentive of all members of the assembly team for final results.

From the recommendations on the organization of self-supporting contracted subdivisions, approved by the Scientific and Technical Council of the USSR Ministry of Agriculture:

The organizational form of the permanent production team, its number of members and its professional-skills composition will depend on the labor-intensiveness of cultivated crops, the equipment employed and other factors. Depending on specific circumstances, these subdivisions can be: specialized, engaged in the cultivation of one or two crops; comprehensive, engaged in the cultivation of several agricultural crops within a single field complex; mechanized, specializing in the cultivation of fodder crops on irrigated land and the simultaneous fattening of young cattle and sheep, and others.

The Compilation of Cost Accounting Assignments

Speaking at an all-union conference in Belgorod on 18-19 March 1983, Secretary M. S. Gorbachev of the CPSU Central Committee, member of the CPSU Central Committee Politburo, said that the incorporation of the collective contract would require more careful planning and economic analysis, a higher level of production management and organization, the strict observance of technological discipline and the reinforcement and considerable improvement of the work of economic services on the part of the administrators of kolkhozes, sovkhozes and agricultural agencies. It will be particularly important to put the organizational structure and all economic links on farms on a self-supporting basis.

Economically sound assignments for contracted subdivisions contribute, first of all, to heightened labor enthusiasm among the members of brigades, links and detachments, because they clarify their goals, and, secondly, to the use of the precise technology which will make the attainment of these goals possible.

Content of Assignments

Cost accounting assignments for brigades and links stipulate production volume above all. They include agritechnical, organization-economic and other measures to ensure the fulfillment of the contract with specific limits on the amount of labor and resources expended on this volume.

The reinforcement of cost accounting relations and the granting of independence to subdivisions in making decisions on production matters will place high demands on the planning system.

What is the cost accounting production assignment for the subdivision working on a collective contract? In each specific case the content of the assignment will depend on the conditions and nature of production, but there are certain common principles of their compilation.

We will cite the content of the cost accounting assignment of contracted subdivisions on the Kolkhoz imeni Frunze in Belgorod Oblast as an illustration. The assignment is divided into three main sections:

The production of goods and their sale to the state; production expenditures;

Economic interrelations between the kolkhoz board and the subdivisions.

In farming assignments the yield is planned by averaging the yield for the last 5 years. In animal husbandry, self-supporting subdivisions are assigned a particular gross milk yield with a view to the physiological condition of the herd and the average level of productivity over the past 5 years.

The fulfillment of assignments is recorded and verified each month, and in farming teams this is done each work season.

Check book limits are used for the efficient control of intrafarm transactions between subdivisions, as well as between subdivisions and the kolkhoz board.

Metaphorically speaking, the kolkhoz has its own intrafarm bank, where accounts have been opened for each self-supporting subdivision. The limit on monthly expenditure items is recorded in the subdivision's check book at the beginning of the month according to the financial plan.

The methods of determining interrelations are simple: Output is calculated and prices are set just as they are on all farms (average overhead costs for the past 5 years plus the projected profit). The division bookkeeper compiles a financial plan for the year, broken down by months, in accordance with product increments and expenditures.

Expenditure coupons are sent throughout the month to the financial economist at the end of each 5-day week, and he balances the accounts.

For example, 1,000 was allocated for tractor repairs, but the repair cost 800 rubles. The remainder is 200 rubles. The next repair cost 300 rubles. The economist informs the division bookkeeper that the limit has been exceeded, the bookkeeper brings this to the attention of the division chief, and the work cannot be performed unless the limit is raised. The kolkhoz chairman can authorize a higher limit, but any subsequent requests by the subdivision must be authorized by a decision of the kolkhoz board.

All seeds, fodder, fertilizer, fuel, lubricants and other production resources are kolkhoz property. For this reason, they are issued for production needs from kolkhoz warehouses in accordance with established limits.

Intrafarm prices are in effect in self-supporting subdivisions. For example, when livestock is transferred from one subdivision to another, its quality is taken into account. Young cattle of more than average weight are transferred at 10 percent above the average price (per quintal of live weight), and cattle of less than average weight are transferred at 10 percent below the average price (157 rubles).

The machine repair shop is responsible for the quality of repairs. If an accident occurs through the fault of the repair shop, a claim is filed and 50 percent of the value of the standard operational volume for the period of the tractor's idle time is withdrawn from the repair shop's account.

The compilation of cost accounting assignments begins with the drafting or clarification of technological charts. They are drafted (or clarified, if the collective has been operating for more than a year) with the participation of brigade or link members and under the supervision of farm specialists. The technological charts stipulate volumes of agricultural work for each crop or group of crops. They are used as a basis for the calculation of total wages, labor expenditures, tractor, combine, agricultural machine and implement

requirements and the requirements for fuel and lubricants and funds for repair and technical maintenance.

On many farms the calculation of agricultural work performed by each brigade and link and the degree of participation in the work by each member of the work team is regularly conducted by the head of the production subdivision. Each month he compiles and signs a graph tabulating the working time of brigade and link members, which then serves as a basis for the calculation of monthly advances to workers and kolkhoz members.

This document serves as a basis for the ongoing analysis of the utilization of working time by subdivisions and as a record of the size of advance payments.

It is useful to compare the actual advances made to brigade and link members with estimated wages for the actual volume of work performed by the team.

The results of the work of contracted subdivisions and the results of analyses of the expenditure of material and financial resources should be discussed regularly by brigade councils and general assemblies of work teams.

The cost accounting assignment of a subdivision on the Kolkhoz imeni Lenin in Kochubeyevskiy Rayon in Stavropol Kray is presented below.

Cost Accounting Assignment of Mechanized Detachment No 1 for 1983

Crops	Area (hectares)	Yield (quintals per hectare)	Gross yield (quintals)	Piece-work rate (kop. per quintal)	Projected total wages (rubles)
Winter wheat	763	32.8	25,026	18.3	4,580
Winter barley	250	31.0	7,750	18.8	1,457
Oats	90	28.0	2,520	23.3	587
Silage corn	66	260	17,160	6.2	1,064
Sugar beets:					
physical weight	500	280	140,000		
accounting weight	500	260	130,000	6.8	9,180
Fodder beets	33	258	8,514	6.8	580
Perennial grasses					
for green feed	121	180	21,780	1.6	348
Silage winter grain	50	180	9,000	3.5	315
Fodder corn catch crop	250	115	28,750	2.6	747

Note: Some figures in the graph--gross yield and projected total wages--have been rounded off. The projected total wages for sugar beets were calculated in the following manner: $(140,000 + 130,000) : 2 \times 6.8$.

Financial Compensation for Labor

The decree of the CPSU Central Committee and USSR Council of Ministers "On Measures To Heighten the Financial Interest

of Agricultural Workers in a Larger Output of Products and the Improvement of Their Quality," approved by the May (1982) CPSU Central Committee Plenum, says that, for the extensive incorporation of the collective contract in agricultural production, ensuring higher indicators of labor and the conservation of resources, it authorizes directors of sovkhozes and other state agricultural enterprises to set stable rates and payments for a period of up to 5 years for work brigades and links operating on a collective contract, based on up to 150 percent of the projected standard wage fund, depending on the yield of agricultural crops and the productivity of livestock and poultry.

The payment of wages and financial incentives for the final results of production is one of the important requirements of the organization of contracted subdivisions. What aspects of this subject should be given more attention? Above all, the calculation of rates for products and the procedure for the distribution of wages among members of the contracted subdivision.

According to Piece-Work Rates

Wage statutes are in effect on each farm. During classes questions could be asked about the validity of these statutes. This is why it is important to learn about the experience of other farms to see if some changes should be made in the terms of financial compensation for labor in the contracted subdivisions of the auditors' own farms.

For example, the statute on the payment of wages to contracted subdivisions on the Kolkhos imeni Frunze in Belgorod Oblast says that the basic wage in mechanized links is paid for the crop raised by the link according to piece-work rates and for the volume of general farming work, repairs and technical maintenance performed.

When the piece-work rate is set, the standard total wages for the projected volume of work on each crop in the technological chart are calculated. Technological charts include all of the mechanized operations in the cultivation of the specific crop (with the exception of motor transport and chemical operations), and also weeding on roads, forest strips and the land around haystacks.

Additional payments for products are added to the standard wages in the amount of 25-50 percent of the standard total wage. These combined funds constitute the total piece-rate wage for the crop. The rate per quintal of product is calculated by dividing the total piece-rate wage by the accounting weight of the projected gross harvest.

The projected yield for the calculation of the piece-work rate is the average yield of the crop on the entire farm in the past 5 years.

The combined piece-work rates for all crops assigned to the link make up the projected piece-rate wage in the link for the year.

In addition to this wage, payments are calculated for the following elements of link production:

- a) for the performance of work not stipulated in technological charts on the link's assigned fields, on contracts signed by the department or division agronomist;
- b) for the performance of field work on the fields of other links on contracts signed by the leaders of these links and the bookkeepers of the divisions where this work is performed;
- c) for the performance of general brigade or general farm work on contracts signed by the individual supervising the performance of this work;
- d) for the repair and maintenance of equipment assigned to the link on contracts signed by the division mechanic.

If the link cannot perform the work stipulated in technological charts on schedule, the administrator of the division or department has the authority to enlist the help of machine operators from other links. The wages of the recruited workers, including surcharges for products, will be paid on contracts from the link's total wages.

Wage payments for above-plan products will include a 50-percent surcharge.

The total annual wages of the link will be distributed to its members at the end of the year in accordance with the number of days worked by each machine operator, regardless of the type of work performed.

The degree of financial liability for violations of production and labor discipline is calculated in various ways on different farms. On the abovementioned kolkhoz, for example, the brigade council deducts a specific number of workdays from the wage account of the link member who has committed a particular violation. A record of the council meeting is sent to the bookkeeper as official notification of this action.

How are these deductions calculated? The advance payment of 120 rubles is divided into 25.4 workdays a month. The rate for a single day is 4.78 rubles. The link council decides on the number of days to be deducted from the link member's wages, depending on the nature of the violation.

Here is another example. On the Kolkhoz imeni Lenin in Kochubeyevskiy Rayon in Stavropol Kray there is a specific percentage reduction in advance payments, bonuses and supplementary wages for violations of production and labor discipline. The reduction is 35 percent for tardiness, unexcused absences and early departures from work; 35 percent for violations of the performance technology; 30 percent for the unsatisfactory state of assigned equipment and the violation of safety regulations.

According to Progressive Rates

Some farms have already started using the progressive wage rate system, which rewards the continuous growth of production volumes and the augmentation of yield and livestock productivity. For example, in contracted teams in Belyayevskiy Rayon in Orenburg Oblast, progressive rates are calculated by adding 25 percent (for products) to the standard total wage and supplementary payments for the quality of work and the adherence to schedules.

Depending on the specific conditions of production (soil quality, stepped-up plans for the yield of cultivated crops, the cultivation of new crops on the farm, the stability of the work of links with high indicators, etc.), sovkhozes (or kolkhoz boards) can calculate product surcharges at 30, 40 or even 50 percent of the standard wage instead of 25 percent.

Progressive rates are calculated on the basis of minimum and maximum yield figures. The minimum yield is the farm average for the preceding 5 years.

The maximum yield of agricultural crops is calculated on the basis of the level reached in the preceding 5 years. On farms where the average yield of the past 5 years was lower than the rayon average for the same period, the maximum yield is set at 35-40 percent above the average 5-year figure.

On farms where the yield of agricultural crops has been higher than the rayon average in the past 5 years, the maximum yield should exceed the 5-year figure by 30-35 percent. If the average 5-year yield of the farm exceeds the rayon average for the same period but is not as high as the indicators of the best farms in the rayon or oblast and is significantly below the indicators of strain-testing plots, the maximum yield will generally be 25-30 percent above the average 5-year figure.

On farms where agricultural crops produced a high yield from year to year and where the average yield indicator for the past 5 years is close to the indicators of strain-testing plots or leading brigades and links in the rayon or oblast, the maximum yield is set at 10-15 percent above the average 5-year figure, and the minimum yield is at least 90 percent of this figure.

After the yield extremes have been set, a piece-work rate is calculated on the basis of the average yield figure and the standard wage on the technological chart, augmented by 25, 30, 40 or 50 percent. Supplementary payments for high-quality work and adherence to schedules are added to the augmented wage when surcharges are calculated.

The yield figures and surcharges are revised if there are significant changes in the conditions of production, the strain composition of crops, the quantity of fertilizer used and the level of technical support or if there are improvements in the machines and technology for the cultivation of agricultural crops.

If a link does not attain the average yield for reasons beyond its control, at the end of the year the team is paid the difference between the total wage for the volume of work performed and the advance payment.

Each member of the contracted subdivision receives a monthly advance before the final payment is made for production output. The size of this advance is calculated in various ways on various farms. On the Krasnyy Oktyabr' Kolchoz in Surkhan-Darya Oblast, the size of the monthly advance depends on the worker's skill category. On the Meleuzovskiy Sovkhoz in the Bashkir ASSR, a contracted link engaged in the production of fodder and fattening of livestock is paid a monthly advance in the amount of 5.18 rubles per working day for mechanization specialists and 3.67 rubles for operators. The advance is paid upon the submission of the work-output record kept by the link leader.

At the end of the year payments are made for the actual output according to the following rates:

Per quintal of weight gain:

In winter (October-April)--7.79 rubles.

Breakdown: a) operators--4.09 rubles; b) mechanization specialists--3.70 rubles.

In summer (May-September)--3.93 rubles.

Breakdown: a) operators--2 rubles; b) mechanization specialists--1.93 rubles.

Per quintal of corn green mass--6.03 kopecks.

Per quintal of annual grasses (green mass)--7.71 kopecks.

The size of payments for products is not limited.

For each percentage of above-plan farming products a bonus is paid in the amount of 1 percent of the total wages stipulated in the technological chart.

For the overfulfillment of the plan for the gross weight gain a bonus is paid in the amount of 20 percent of the value of the above-plan weight gain.

By law, the amount of the bonus for above-plan products should not exceed 60 percent of the actual wage for weight gain in livestock. The link leader receives a supplementary payment in the amount of 10 percent of his wage for managerial services.

Therefore, the monthly advance can be calculated in a number of ways.

Attention should be focused on the terms of the final payment for final results. This can also be approached from different vantage points, but they must all be based on the negotiated terms of the contract. On the abovementioned Meleuzovskiy Sovkhoz, accounts with contracted subdivisions engaged in the production of fodder and the fattening of livestock are settled in the following manner:

<u>Product</u>	<u>Planned figure</u>	<u>Actual figure</u>
Weight gain in cattle (quintals)	3,028	3,977
Gross yield of corn green mass for green fodder (quintals)	20,000	21,380
Gross yield of annual grasses for green fodder (quintals)	8,000	7,640

Actual Amount of Payment for Products

The average rate for a quintal of weight gain is 6 rubles 40 kopecks.

Payment for the gross weight gain (3,977 quintals x 6.40 rubles) = 25,453 rubles.

The yield of corn green mass (21,380 quintals x 6.03 kopecks) = 1,289 rubles.

The yield of green mass of annual grasses (7,640 quintals x 7.71 kopecks) = 589 rubles.

Calculated total for products (for weight gain of 25,453 + yield of corn green mass 1,289 + yield of annual grasses 589) = 27,331 rubles.

Advance received by link members and recruited workers during the year--12,900 rubles.

Supplementary payment for products at end of year (27,331 rubles - 12,900 rubles) = 14,431 rubles.

Bonus for Above-Plan Weight Gain

Above-plan weight gain (3,977 quintals - 3,028 quintals) = 949 quintals.

The value of the above-plan weight gain is calculated as the difference between the value of actual weight gain according to actual sale prices and the value of the planned weight gain according to planned sale prices.

The value of above-plan weight gain (558,888 rubles - 468,128 rubles) = 90,760 rubles.

According to the collective contract the bonus is equivalent to 20 percent of the value of the above-plan weight gain.

Total bonus: 20 percent of 90,760 rubles = 18,152 rubles.

According to the collective contract, the maximum bonus for above-plan products should not exceed 60 percent of the actual wage received for the weight gain.

Actual bonus: 60 percent of 25,453 rubles = 15,272 rubles.

Final End-of-Year Payment

Advance payments received by link members and recruited workers during the year	12,900 rubles
Supplementary payments for products at end of year	14,431 rubles
Bonus for above-plan products	15,272 rubles
Besides this, link members were paid:	
a) for high skill categories of mechanization specialists	2,545 rubles
b) for high skill categories of operators	636 rubles
c) for supervision of link by link leader in the amount of 10 percent of his supplementary payment for products	295 rubles
The total amount paid to link members and recruited workers, including all supplementary payments and bonuses	46,079 rubles

The Basis of the Negotiated Contract

From the contract negotiated by A. Kolesnik's link with the board of the Kolkhoz imeni Prunze in Belgorod Oblast:

The kolkhoz board pledges:

To assign the link a field by 1 July for the preparation of the soil for next year's harvest (the contract stipulates the sowing area for each crop);

To supply the link with the necessary agricultural equipment, high-quality seeds, fertilizer, herbicides, toxic chemicals, spare parts, fuel and lubricants and other materials in accordance with the operational volume planned in technological charts;

To ensure the timely loading of machinery with fuel, lubricants, water and seeds and to deliver hot meals to machine operators in the fields during the season of field work;

To pay link members an advance of 120 rubles a month prior to the final payment for products. Accounts will be settled in accordance with quintals of products in accounting weight.

Link members pledge:

To fulfill the piece-work assignment in line with the expenditure limits stipulated in technological charts and with supplementary payments for products and other incentives;

To perform all work specified in technological charts on schedule, with high quality standards and in strict compliance with production technology.

The content of the agreement is generally connected with the cost accounting assignment of the brigade, link or other contracted subdivision and the farm administration's provision of the material, technical and other resources needed for the fulfillment of this assignment.

But it is one thing to record mutual obligations in an agreement and quite another to negotiate liability for the failure to meet contract terms. Unfortunately, on some farms the agreements concluded by contracted subdivisions with the kolkhoz board or sovkhos directors contain only a list of the obligations of the negotiating parties.

In this respect, we feel that the negotiating experience of the contracted mechanized detachment on the Kolkhoz imeni Lenin in Stavropol Kray, headed by N. Kobzar', warrants consideration.

The agreement stipulates, in particular, that if the detachment should deviate from schedules in the calendar plan or cannot complete work within the dates specified by soil scientists and this leads to product losses, the administration is authorized to complete these operations with the aid of other forces and means at its disposal and to pay for this labor according to the farm's standard wages and surcharges out of the link's total wages.

The kolkhoz board pays supplementary wages and bonuses for the final results of the year, regardless of the actual total wage expenditures on the farm.

The administration has the right to enlist the services of people and equipment from the detachment only with the consent of detachment members.

The kolkhoz board and the members of the mechanized detachment are liable for violations of contract terms within the limits of their rights and obligations in accordance with standard statutes on the terms of intrafarm accounts.

The failure of the kolkhoz board to meet the terms of the agreement is regarded as a production error, for which the bonus of specialists serving the detachment can be reduced by up to 10 percent and the bonus of chief specialists can be reduced by up to 15 percent. If the mechanized detachment is responsible for the overexpenditure of resources per unit of product or fails to meet the terms of the contract, its bonus for the final results of the year can be reduced, but by no more than 50 percent of the calculated sum.

Here is how the liability of the negotiating parties is defined in the agreement of the contracted link headed by State Prize Winner V. Yevchenko on the Meleuzovskiy Sovkhoz in the Bashkir ASSR with the directors of the sovkhos.

It says that if the link does not perform any specific agricultural procedure stipulated in the technological chart and this has a negative effect on the harvest, the sovkhos directors can deduct the amount spent on the performance

of this procedure from the link's wages when the final payment is made for products.

In short, the terms of mutual responsibility for the fulfillment of assumed obligations are a constituent part of the negotiated contract. Its compilation on this farm is approached with particular care, with consideration for all aspects, so that the interests of self-supporting subdivisions are not restricted in the least. The contract first stipulates the mutual obligations of the sides. Whereas the link pledges to produce the planned quantity of products on schedule and with work of high quality, the administration promises to supply it with all of the necessary materials and equipment, payment for products, surcharges for high skill categories and seniority and a bonus.

To derive the maximum impact from the use of collective contract, the farm administration also tried to relate the work of specialists to final results. They are paid according to their salary scale and a 25-percent increase for products. Surcharges for products are calculated with a view to the planned total wage of the specialists and the annual gross weight gain of cattle in the division where the specialists work. Besides this, the specialist is awarded the average bonus paid to workers for the overfulfillment of the plan at the end of the year.

Competition by Contracted Teams

From Article 12 of the act "On Labor Collectives and the Augmentation of Their Role in the Management of Enterprises, Establishments and Organizations":

Labor collectives:

Will heighten the labor enthusiasm of collective members to the maximum, develop socialist competition and the movement for a communist attitude toward labor;

Will approve the terms of socialist competition at enterprises, establishments and organizations, determine the moral and financial rewards for winners;

Will assume socialist commitments and take action for their fulfillment; ensure the coverage of socialist competition, summarize results and name winners;

Will take part in the planning and implementation of measures to disseminate and incorporate advanced experience;

Will conclude agreements on socialist competition and creative cooperation with other labor collectives.

Now that self-supporting subdivisions are being created on kolkhozes, sovkhoses and other agricultural subunits, the more objective comparison of the results

of competition and the determination of winners are possible. After all, several contracted subdivisions are engaged in the production of the same items and the cultivation of the same crops. This is why the comparability of results is indisputable.

Incentives for the Fulfillment of Obligations

The experience in the organization of labor competition by animal husbandry workers on farms in Cherkassy Oblast warrants consideration. As we know, on several kolkhozes and sovkhozes all of the work involved in the organization of competition is reduced to the mere choice of winners. But after all, success in production activity depends not only, and not so much, on production leaders. Analysis has shown that production leaders account for 10-15 percent of the gross output.

In Cherkassy Oblast the terms of competition also envisage indicators which ensure the conferment of awards not only on brigades and links with the highest results but also on each production subdivision that fulfills its commitments and reaches a specific level. When the results are tallied, certain conclusions are drawn so that each collective and each participant know their own achievements and the successes of those alongside them and ahead of them and learn how they can surpass their closest rivals.

News bulletins are issued for this purpose within agroindustrial associations. The stimulation of winners is an important part of the work of administrative and trade-union organizations. Under the conditions of collective forms of labor organization, the entire collective is rewarded. The coefficient of labor participation is used for the objective assessment of the contribution of each individual. In order to avoid subjective evaluations, a special statute has been drawn up, stipulating the appropriate coefficients for the augmentation of product quality and livestock productivity. The coefficient of individual participation naturally decreases with each production error.

According to Personal Impact Accounts

The competition according to personal impact accounts at the Far East Poultry Factory is of interest and can be used on kolkhozes and sovkhozes.

The merits of this method consist in the precise and completely objective determination of the winners of intrafarm socialist competition, which was not possible in the past because the area of concentration was gross output for some, poultry productivity for others, fodder expenditures for others and preservation of the flock for still others. Disputes in this area were quite successfully settled by the personal account, in which all indicators are calculated in monetary terms, and the winner is the one with the highest economic impact. How is this actually done?

First of all, the necessary preparatory work was conducted. The terms of socialist competition were worked out. The indicators to be included in the personal account were chosen: egg yield, poultry disease, substandard poultry and fodder expenditures.

Hypothetical prices were set in rubles to calculate the economic impact: 100 rubles for 1,000 above-plan eggs, 5 rubles for each head of poultry preserved over and above the plan, 1 ruble per head for reductions in substandard poultry, and 20 rubles per quintal of conserved feed units.

To reward the workers who had attained a specific impact, a scale of bonus payments was compiled on the basis of economic impact per 1,000 head of poultry at the beginning of the period (in rubles):

<u>Total impact</u>	<u>Total Bonus</u>
Under 50 rubles	10 rubles
From 51 to 100	15 rubles
From 101 to 200	20 rubles
From 201 to 400	30 rubles
From 401 to 700	40 rubles
From 701 to 900	50 rubles
901 and higher	55 rubles

The drafted documents were discussed at an extended meeting of the trade-union committee, attended by all specialists, shop chiefs and brigade leaders. It was decided at this meeting that brigade leaders would be responsible for the processing of personal accounts so that this important job could be performed more efficiently. They organize competition by their production subdivisions, regularly tally the results of the work of each brigade member and can calculate impact correctly and on schedule. For this purpose, brigade leaders attended several special classes to learn the procedure of keeping personal impact accounts.

Workers who have fulfilled the conditions of socialist competition are rewarded according to the monthly results of their work. The labor glory banner is raised in honor of the winners.

According to quarterly and yearly work results, three winners are chosen from among poultry yard monitors, two winners from among poultry breeding brigades and one winner from among fitter-operator brigades. They are awarded challenge red pennants and monetary bonuses, and second- and third-place winners are awarded monetary bonuses. The best collective is awarded a challenge red banner and a monetary bonus.

The winners of the annual competition are rewarded with tours of the Soviet Union.

At first only the workers in the main shops participated in the competition according to personal impact accounts. After the expediency of this method became evident, the workers of the egg sorting and packing shop also began to compete on this basis. The personal accounts of workers in this shop reflect the quality of operations on which the commercial appearance of products depends.

This type of competition can be used in any contracted self-supporting subdivision. Of course, the specific indicators in personal impact accounts will depend on the nature of production.

On some farms socialist competition is being organized according to the principle of "cooperation agreements." As we know, in agriculture these agreements are concluded by kolkhozes, sovkhoses and the organizations serving them, as well as processing enterprises.

Now this method of competition is being used on some farms in Belgorod, Cherkassy and some other oblasts by contracted subdivisions engaged in fodder production and the workers of animal husbandry farms, repair shop links and mechanized links.

The decree of the CPSU Central Committee, USSR Council of Ministers, AUCCTU and Komsomol Central Committee on the results of the all-union socialist competition for the successful wintering of livestock and the increased production and procurement of animal husbandry products in the winter of 1982/83 says:

"The educative value of socialist competition must be used more widely, labor collectives must be given a more important role and their efforts must be directed toward a maximum increase in the output of animal husbandry products, the improvement of all quality indicators and the unconditional fulfillment of assignments."

Rayon agroindustrial associations (RAPO) have an important role to play in the dissemination of advanced experience in competition.

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EDUCATION

LITHUANIAN PARTY SECRETARY DISCUSSES RURAL EDUCATION

Moscow NARODNOYE OBRAZOVANIYE in Russian No 8, Aug 83 pp 13-17

[Article by L. Shepetis, secretary, Central Committee of the Lithuanian Communist Party: "An Important Link in the Party's Agrarian Policy"]

[Text] A meeting of graduates of the Pabyarzhe Secondary School in the Vilnyusskiy Rayon was held at the school in April 1983. The graduates issued an appeal to all graduates of Lithuania's rural general education schools to go to work on kolkhozes and sovkhozes after completing their studies, to master agricultural occupations, to devote their strength and knowledge to their home village. In their appeal, the graduates wrote: "We are profoundly aware of the need for youth to reinforce the ranks of the rural work force as an important condition to implementing the decisions of the May (1982) Plenum of the CPSU Central Committee and the country's Food Program." Forty graduates of this school have resolved to become equipment operators, animal husbandrymen and builders, to continue their studies in agricultural educational institutions with the aim of subsequently returning to their home village.

This decision was not a matter of chance.

The youth attending this school were among the first in the republic to create the "Draugiste" ("Friendship") pupils' production brigade almost 12 years ago. The "Pabyarzhe" Sovkhoz set aside a 0.12 hectare plot on which the brigade's pupils could carry out various types of experiments. Scientists associated with the Vokeskiy Affiliate of the LSSR Agricultural Scientific Research Institute extended their patronage [sheftstvo] to the young naturalists.

Upperclassmen learn how to drive a tractor and study agricultural production techniques. In the summer, 10-15 pupils work as tractor drivers' helpers. In addition to taking their final exams, these children as a rule also pass examinations qualifying them to operate tractors and other farm machinery and join the family of graingrowers. In the last 5 years, more than 150 graduates of this school have chosen agricultural occupations.

The appeal of the Pabyarzhe graduates was discussed at open Komsomol meetings held in republic schools. Hundreds of boys and girls followed the example of the Pabyarzhe pupils and have joined the ranks of the graingrowers. And in December of this year they will hold their first rally.

This patriotic movement of rural school pupils acquired mass character and became possible because the Communist Party and the Soviet state show unceasing concern for our country's younger generation, for the further development of the kolkhoz village.

The July 1973 decree of the CPSU Central Committee and USSR Council of Ministers "On Measures for Further Improving the Working Conditions of the Rural General Education School" is vivid evidence of this concern.

Owing to the fulfillment of the party-government decree, the rural school has grown immeasurably in the last decade, its physical plant has been strengthened, energetic young specialists have joined the army of rural teachers, and the cooperation of the school, the family and production collectives of farms and their patronage over the schools have grown stronger.

The rural school has become a very important stabilizing factor in the resolution of demographic problems, in raising the cultural level of the countryside, in the training of future grain farmers, and in instilling youth with a love of the land, with a love of agricultural work. In cooperation with rural vocational-technical training schools and agricultural technicums, they form a harmonious system for educating, training and preparing rural youth for work, for life.

The decree on the rural school is closely associated with the party's agrarian policy which has been further developed in the decisions of the 26th CPSU Congress, the May and November (1982) Plenums of the CPSU Central Committee, and in reports and pronouncements by Comrade Yu. V. Andropov, general secretary of the CPSU Central Committee.

At the present time, our republic has 1729 rural general education schools, including 230 secondary schools, 588 eight-year schools and 911 primary schools, which account for 30.3 percent of the republic's total school enrollment. Young specialists in 14 different occupational specialties are trained by 21 sovkhos-technicums and 1 agricultural technicum that graduate annually approximately 4000 specialists. The rural system of vocational-technical education has undergone further development. In 1971, there were 19 vocational-technical training schools in operation in rural areas; today they number 30. These schools admit 8000 adolescents a year. During the entire postwar period, vocational-technical training schools have graduated more than 130,000 rural workers.

The rural school must provide reinforcements not only for VUZ's, technicums and vocational-technical training schools that train personnel for the material production sphere but also for the service sphere, culture, education and health care. With the development of agro-industrial complexes, with the stabilization of kolkhoz and sovkhos settlements and with the intensification of agricultural production, more and more cadres in various occupational specialties are required for the countryside. Thus the social function of the rural school is growing even more.

Every rural rayon in the republic has prepared plans for the social and cultural development of the countryside. They cite general education schools and in particular proceed from the need to establish at least one eight-year school on every kolkhoz and sovkhos and to establish at least one secondary school for every three kolkhozes or sovkhoses.

The rural school does not function in isolation from rural social and cultural life but closely interacts with it. Therefore in addition to school construction, the problem of improving cultural and living conditions of the work force is being resolved at an accelerated pace. In the last 20 years, the number of public catering enterprises increased 4.5 fold; stores--1.1 fold; culture centers--1.3 fold; nonmobile film projection units--2.7 fold; library books per worker--1.6 fold; and volume of consumer services rendered to the rural population--16.5 fold.

In 1982, there were more than 900 culture centers (with an average capacity of 180 places), 827 luncheonettes, 2180 stores and other trade points, 850 consumer service booths and receiving points, and 1100 outpatient and paramedic-midwife points.

All this comprised a stabilizing factor of no little importance in improving the rural demographic situation, in raising the level of agricultural production.

In the process of coping with the complex task of educating and of giving a communist upbringing to the rural younger generation, in the last decade the rural school in Soviet Lithuania has gradually expanded its social function. Its role has been raised in the implementation of the agrarian program and in economic and cultural construction in the countryside. The successful realization of such important tasks has in large measure depended on the rational organization of the school network. In connection with the specific features of the khutor [separated farm] system that historically formed in Lithuania, the school network has until the recent past been characterized by a large number of small primary, eight-year and secondary schools.

It should be remembered that public education in Soviet Lithuania had a very sad legacy from the times of the bourgeois state. Most of the rural primary schools were housed in leased buildings. Notwithstanding the bourgeois order's official proclamation of compulsory primary education, in the year 1940 approximately 10 percent of the children were not attending school and more than half of the pupils did not even finish the fourth grade. Secondary education was in an even worse condition. There was not a single rural secondary school; moreover, some of the school buildings were destroyed during the war and the fascist occupation.

Universal compulsory primary, seven-year and later eight-year education in the postwar years led to the considerable expansion of the school network. There was no other way to sustain the high rate at which the general educational level of the rural population was rising. We must not lose sight of the fact that the majority of the population lived in the countryside, on khutors scattered throughout the entire republic. Frequently the roads were bad, there were no school dormitories, the farms did not have buses and the network of motor transport communications was only developing at the time. Accordingly everything was done to bring the school as close as possible to the place where the children and adolescents lived. The dense network of schools played an enormous part in raising the general educational level of the population, in the education of the new man as an active participant in communist construction and was of inestimable importance to all cultural and sociopolitical life in the countryside.

Under the 8th, 9th and 10th Five-Year Plans, it became possible to provide a more rational pedagogical and economic solution to the problem of siting the network of rural general education schools. The decree of the CPSU Central Committee and the USSR Council of Ministers on the rural school was of major importance in this important work.

After this decree, Lithuania launched a school consolidation program. With each passing year, more and more favorable conditions were objectively created for the practical resolution of this problem. Kolkhoz farmers were moved from khutors to settlements, the construction of school dormitories was expanded and bus service was developed. The process of curtailing small primary and eight-year schools commenced and gained momentum at the same time that the number of secondary schools stabilized and their enrollment increased.

In the resolution of the question of making various changes in the network of rural general education schools, primary attention has always been focused on three circumstances: (1) on the creation of conditions enabling all children to obtain the minimum general education that our society required at a given time; (2) on making the teaching and upbringing process as effective as possible; and (3) on the necessity of improving the demographic situation and on promoting the stability of kolkhoz and sovkhos settlements.

As a result of the planned, purposeful work of party organs, soviet organs and public education departments, the number of rural primary schools declined by 885 and the number of eight-year schools declined by 126 while the number of secondary schools increased slightly between the 1972/73 school year and the 1982/83 school year. At the beginning of the 1982/83 school year, 1729 schools or 81 percent of the total number of republic general education schools were situated in rural areas.

The process of closing down small primary schools and of converting small eight-year schools into primary schools is continuing. But it would be a mistake to force this process artificially. When any school is closed down or reorganized, every one of its pupils must have the opportunity to attend another school. It must not be forgotten that to the inhabitants of a given locality or farm, any school whether an eight-year or even primary school, is "their school," that the school performs important functions in the social development of the countryside and in retaining young families in one or another subdivision of the farm.

Long-range plans governing the formation of the rural school network have been repeatedly compiled and refined in the past decade. The shortcomings of previous plans have been taken into account and the attempt has been made to lay a scientific foundation for this work. The present plans for the siting of the rural school network have a more substantial scientific foundation. According to these plans, by the year 1990 the number of secondary and eight-year schools in the republic's rural areas will increase slightly while the network of primary schools will diminish. Accordingly, a considerable amount of work will have to be carried out under the 11th and 12th Five-Year Plans to improve the school network.

The consistent consolidation of rural schools in the last decade and the broad concurrent school construction program strengthened their physical plant significantly. Between 1974 and 1982, new schools of all types and annexes at existing schools with 72,000 pupil places were put into operation. The construction of some schools (with 19,900 pupil places) was jointly financed by kolkhozes and sovkhozes.

The further improvement of the rural school network is in large measure associated with the siting of school dormitory-hostels. The republic presently operates 453 school hostels that accommodate approximately 20,000 pupils.

The problem of transporting children to and from school has also been resolved for the most part. All pupils (approximately 70,000) living three or more kilometers from school are transported to and from school by sovkhoz and kolkhoz motor vehicles and by express buses.

The decree on the rural school posed the task of furnishing all secondary and eight-year schools with well-equipped classrooms and workshops. With the aid of (base) kolkhoz, sovkhoz and enterprise patrons, the republic's rural schools have for the most part resolved this problem: all secondary and eight-year schools have been converted to a system of education that is based on specially equipped classrooms (kabinetnaya sistema zanyatiy). However this does not mean that the process of outfitting classrooms and workshops is complete. Much still remains to be done to improve the supply of rural schools with visual aids, laboratory equipment, technical teaching devices, materials and furniture. Constant attention will also be devoted to strengthening the physical plant of schools--especially rural schools--in the future as well.

There have also been certain changes in the distribution of the network of preschool institutions in rural areas. Their number increased by 204 compared with 1976. At the present time, 21 percent of all preschool age children in rural areas are attending preschool institutions. This figure is below the national average (33.8 percent) and therefore special attention will be devoted to the expansion of the network of preschool institutions in the future as well.

In this regard, we should take note of the decision made by Pasvalskiy Rayon builders and graingrowers: to build a day care nursery-kindergarten on every farm before the end of the 11th Five-Year Plan. They are keeping their word and other regions in the republic are actively following their example. Under the 11th Five-Year Plan, day care nursery-kindergartens with more than 24,000 places are slated for construction in rural areas. This will enable a considerably larger number of women to join in active agricultural production work.

The implementation of the party and government decree on the rural school has made it possible to achieve major successes in universal compulsory secondary education in the republic's rural areas and cities. At the present time this objective has been entirely achieved. This is the result of the painstaking work of teaching staffs and public education organs based on the daily aid and support of party, soviet, trade union, and Komsomol organs.

At the same time that the program of universal secondary education of the younger generation is being carried out, it is also very important to provide a secondary education to rural working youth who failed to obtain it earlier for one reason or another. In the last 10 years, there have been major changes in the educational opportunity of rural youth: between 1973 and 1982, 68,000 girls and boys received a secondary education by studying on a part-time basis. In many rayons (Alitusskiy Rayon, Kapsukskiy Rayon, and elsewhere), the absolute majority of young farmers, equipment operators and workers already have their complete secondary education.

Characteristically, in addition to youth, more and more older rural workers are also experiencing the urge to study, to obtain a secondary education. At the present time, one-third of the people enrolled in rural evening and correspondence school are older than 30 years of age. It should also be noted that after completing their general secondary education, most rural workers continue their education by correspondence in secondary specialized and higher education institutions.

The preparation of a young person to work in agricultural production under the conditions of developed socialism presupposes the unity of broad general and polytechnical education, deep communist convictions, high morality and the ability to work successfully to multiply the material and nonmaterial wealth of the republic and the nation. The December (1977) decree of the CPSU Central Committee and the USSR Council of Ministers on the further improvement of the teaching and upbringing of pupils and their preparation for labor emphasized with particular intensity the necessity of raising the level of all educational and upbringing work in the school.

Only if all pupils are instilled with deep and lasting knowledge in accordance with the demands of scientific and technical progress, with a scientific-materialistic world-view and the moral outlook of a builder of communism can the rural school prepare active workers for modern agricultural production.

One of the important tasks of the rural general education school is to promote the retention of educated and skilled cadres in the countryside. This task acquires special significance in the fulfillment of the Food Program ratified by the May (1982) Plenum of the CPSU Central Committee which assigns a high measure of responsibility to the rural school for preparing ideologically convinced, thoroughly developed workers.

Obviously those young people who studied agricultural equipment, agronomy or animal husbandry and were members of pupil production brigades while they were still in school are most likely to find their life's work in agricultural production. School pupils also opt for such a career first and foremost where kolkhozes and sovkhoses work closely with the school and take part in the vocational guidance of all pupils, where the leadership of agricultural enterprises is ever mindful of the school and relates attentively to its needs, where good living conditions have been established for young specialists. School graduates are willing to remain on such farms or to return to them upon graduation from vocational-technical training schools, secondary specialized or higher agricultural education institutions.

For example, more than 80 percent of the equipment operators on the "Chyakisshes" Kolkhoz in the Kaunasskiy Rayon are graduates of the local secondary school. In the last 3 years, almost 40 percent of the graduates of the Chyakisshskaya Secondary School chose agricultural occupations. The "Galyunay" Kolkhoz in the Alitusskiy Rayon and the Butrimonskaya secondary school, the horticultural sovkhos im. I. V. Michurin and the Klausuchayskaya secondary school in the Yurbarskiy Rayon, the "Mosedis" Kolkhoz in the Skudasskiy Rayon and the Mosedzhyayskaya secondary school, the Sovkhos im. 25th Congress of the CPSU in the Shilutskiy Rayon and the Yuknaychayskaya secondary school, the "Pyargale" Kolkhoz in the Ionishskiy Rayon and the Skaystriryayskaya secondary school, the Kolkhoz im. V. I. Lenin in the Ukmergskiy Rayon and the Deltuvskaya secondary school, and many others cooperate closely in organizing labor training, in strengthening its material base, in resolving problems pertaining to the teaching, upbringing and vocational guidance of pupils and to retaining youth in rural areas.

It is gratifying to note that more and more managers of republic kolkhozes and sovkhos realize that kolkhozes and sovkhos "begin with the school."

Secondary and eight-year schools are strengthening their cooperation with neighboring rural vocational-technical training schools, sovkhos-technicums and higher agricultural education institutions.

In this regard, it must be noted that the further development of the rural general education school is closely associated with the siting of the network of agricultural technicums and vocational-technical training schools in the countryside. While the number of agricultural technicums and their enrollment have stabilized, rural vocational-technical training schools [PTU's] are undergoing further development. By 1985, their number will grow to 36 and by 1990 there will be rural PTU's in virtually every region. Rural PTU's together with agricultural technicums will be able to fully supply agricultural production with skilled equipment operators, animal husbandrymen, builders and other workers in the most common occupations including middle management specialists. Characteristically, there has been an appreciable increase in the number of girls admitted to rural PTU's. By 1985, they will comprise at least 30 percent of the total enrollment. The admission of girls to agricultural technicums will be preserved at the previous level: 41-42 percent. In this regard, it will be considerably more necessary to improve all labor training and vocational guidance in general education schools.

It should be noted that in the past decade the republic has amassed considerable positive experience in improving labor training and education. In the work with pupils, more and more use is made of the production environment of rural schools. All types of activity concerning agricultural work and service work, in metalworking and woodworking shops in grades 4-8, labor training lessons and electives in grades 9-11 have become more purposeful. Of late, the schools have conducted a program to explain the obligations that the implementation of the Food Program imposes on everyone.

Upper graders in all republic rural secondary schools are receiving intensive training qualifying them to be tractor drivers, combine operators, truck drivers, milking machine operators, poultry plant operators, agrotechnicians, electricians, etc. After graduation from school, some of them complete their training in these specialties in short courses and join the ranks of the rural work force.

At the present time, the republic has six rural interschool production training and vocational guidance combines. However in the organization of interschool UPK's [production training combines] there are major difficulties that are occasionally difficult to overcome: most farms are unable to organize and maintain the combines and to provide transportation for the school pupils. It hardly seems feasible to transfer the labor training of pupils from rural schools, where it is well organized, to combines.

Labor associations of school pupils have undergone wide development in our republic as everywhere in our country. In summer 1982, 97.9 percent of the pupils in grades 7-9(10) worked in one kind of labor collective or another.

The republic holds biennial rallies of representatives of labor associations accompanied by contests for young cultivators, field workers and milking machine operators. The republic headquarters for the organization of the recreation of Young Pioneers and school pupils is actively interested in the organization of this work. In 1973, labor associations of school pupils performed 1.5 million rubles' worth of work; in 1982, this figure had already increased to 12 million rubles.

The activity of pupil production brigades, school forestry groups and work and recreation camps is instrumental in improving the labor training and vocational guidance of pupils and in preparing them to choose an occupation.

In 1982, more than 53,000 pupils were working in pupil production brigades. Upon graduating from school, most of the members of these brigades immediately join the rural work force or enroll in an agricultural education institution.

The activity of school forestry groups has also become an effective form of socially useful labor. In the republic today there are 217 such forestry groups uniting more than 16,000 seventh and eighth graders. Members of school forestry groups actively participate in tree cultivation and reforestation efforts, direct the activity of "green" and "blue" patrols, and acquire nature conservation work skills. The physical plant of the forestry groups grows stronger each year: forest industry farms have allotted 28,000 hectares of standing timber to them and supply them with fertilizer, seed and seedlings. Tauragskiy Rayon is renowned for its good traditions: 10 school forestry groups in the rayon are taking care of 664 hectares of forest. The first work and recreation camp for members of school forestry groups was opened in 1982.

We attach great importance to the joint work of school teaching staffs and kolkhoz and sovkhos managers and specialists in explaining the Food Program, in selecting socially useful, productive labor for school pupils in accordance with its intellectual (including, polytechnical) content, with the age of the children while strictly observing the principle of gradually increasing difficulty and continuity. Educationists and agricultural specialists try to see to it that various forms of labor activity of school pupils are closely connected to their ideological, political and moral education, to the strengthening of their health, to the inculcation of esthetic feelings and tastes, have promoted this work and have been an organic element in this work. Schools and farms in the Kaunasskiy, Kupishskiy, Mazheykyayskiy, Shakyayskiy, Yurbarkskiy and other rayons have amassed a certain amount of experience in this regard.

The continuous expansion and strengthening of the ties of school work on the labor education of pupils with the everyday tasks of developing local agricultural production are a characteristic feature in the effort of many rural school teaching staffs to increase the effectiveness of the teaching and upbringing process and to study and implement the Food Program. Taking into account the requirements of a kolkhoz or sovkhov into account, a long-term plan is compiled for the labor activity of school pupils; members of various agricultural circles receive concrete creative assignments from farm managers; in the process of socially useful labor, personal contacts are organized between school pupils and personnel of various branches of agriculture.

It should be emphasized that the labor training of rural pupils is successful and the effort to interest them in agricultural occupations is effective when their agricultural work is based on modern techniques, when the schools have well equipped agriculture classrooms and when kolkhozes, sovkhoves and other agricultural enterprises have the broadest and enduring ties with the schools. While the republic has already done a great deal in this direction, much remains to be done.

The state of public education in the countryside and the perspectives of its future development largely depend on the rural teacher's ideological convictions, on his scientific-theoretical, vocational and methodological training, on whether he can instill pupils with modern knowledge, can give them a communist world-view, and can prepare the younger generation for conscientious labor. The rural teacher is the party's active helper and is the conduit that conveys its ideas to the broad masses of the population.

In connection with the specifics of the organization of upbringing and teaching in rural areas, the teacher, in addition to having a general mastery of educational theory and method, must also have a thorough knowledge of the content, devices, forms and methods used in the work of the grade leader, of the way in which the teacher assists the Young Pioneer and Komsomol organizations, of the organization of the socially useful labor of pupils and out-of-class activities, and of ways of establishing close ties with pupils' parents and the community at large.

The rural school teacher also must have a serious understanding of the scientific principles, state and perspectives of development of agricultural production, of the work, life and traditions of the population. This is an indispensable condition to the teacher's success in coping with upbringing tasks, to his acquisition of authority and influence among pupils and the population and to preparing pupils for an active working life.

A keen interest in everything happening on the kolkhoz and sovkhov, active participation in social work and psychological and moral readiness to promote the development of the village or rayon economy and culture in every way are important qualities of the rural teacher.

Thousands of teachers who are masters of their work and who have won the love and respect of their pupils are at work in Lithuania's rural schools.

Our republic has posed the task of seeing to it that all school principal and teachers--teachers of social disciplines first of all--receive higher political education in the party education system. All the necessary conditions therefor are at hand and a certain amount of experience has been amassed. The party education system is available to practically all teachers including the 1500 teachers that attend universities of Marxism-Leninism each year.

Seminars for teachers and instructors of sociopolitical disciplines and scientific-practical conferences have become a widespread practice in the republic. Starting in the 1982/83 school year, all cities and rayons instituted the practice of regular meetings between officials and teachers of general education schools, and teachers of technicums and vocational-technical training schools devoted the internal and foreign policy of the CPSU. This work was launched by the organization of the unified political day on questions relating to the communist education of the working people. On that day--17 October 1982--members of the Lithuanian CP Central Committee, members of the government, ministries, and the heads of republic organizations met with teachers and visited pedagogical collectives. The subject of discussion was the rearing of children in the family setting, in preschool institutions and in educational institutions. Some party gorkoms and raykoms instituted pedagogical days while others went farther and instituted regular meetings with teachers and upper graders.

The need to focus more attention on the professional training of rural teachers is chiefly explained by the ever increasing role of the rural general education school in the entire life of our society and also by the fact that the rural school is encountering numerous difficulties in the practical resolution of difficult teaching and upbringing problems. Naturally it is necessary to take into account such features as the necessity of working with pupils in different grades in primary school, the combination of the teaching of several subjects in the eight-year and frequently in secondary school, the combination of teaching in daytime, evening and correspondence schools, etc. The reference is to the more careful consideration of these features in the effort to form teachers of any modern general education school--both rural and urban--through improvements in the curricular content, forms and methods of teaching and educating students attending pedagogical VUZ's in the interest of instilling in them the knowledge and skills that enable every young specialist to resolve the school's teaching and upbringing tasks.

Much attention is devoted to providing the republic's rural schools with highly qualified pedagogical cadres. Every year more than 60 percent of the young specialists are assigned to work in rural schools.

A considerable number of rural teachers who do not have a higher education are studying in the correspondence division of VUZ's. The majority of correspondence students are rural school teachers. The LiSSR Ministry of Education and the Ministry of Higher and Secondary Specialized Education focus the constant attention on the correspondence education of rural teachers and indicate specific measures to improve this work. The given efforts have facilitated the gradual elimination of our republic's historical disparity

in the educational levels of rural and urban teachers. In the last decade, there was a considerable increase in the share of teachers of grades 4-11 with higher education. Compared with the 1972/73 school year, the number of subject teachers with complete higher education increased by 40.2 percent and is presently 90 percent.

As they raise their educational, ideological and political level, rural pedagogical cadres are actively participating in social/public work. Many of them are deputies to villaggle and rayon Soviets of People's Deputies, take an active part in the pedagogical education of the pupils' parents, help to organize agricultural work, are active lecturers in the "Knowledge" Society, etc. It can be said without any exaggeration that there is no socioeconomic and political problem in republic rural life that is resolved without the participation of the rural teacher.

An important factor in retaining teachers in the countryside is the improvement of their living conditions. Between 1974 and 1982, 1490 apartments were built for the republic's rural teachers, including 254 apartments that were built by farms. There is every reason to believe that with the help of kolkhozes and sovkhoses, the problem of providing teachers with apartments will be entirely resolved in the near future.

The improvement of the teaching and upbringing process in rural schools obviously also depends largely on the well-conceived organization of all forms of advanced training for teachers. The republic advanced training institute for teachers, rayon methods and pedagogical education institutions are playing an important part in this regard.

In the measures of the republic institute for the advanced training of teachers in the last decade, much attention was devoted to the study of questions in Marxist-Leninist theory, documents of the CPSU and the Soviet state. Courses and seminars examined current problems in pedagogy and psychology, the content and methods of teaching individual subjects and analyzed curricula and textbooks.

Specific features in the work of teachers at small schools are taken into account in advanced training plans. Special attention is devoted to the optimization of the teaching and upbringing processes in small classes and schools.

Rayon methods centers, which stand closer to the sources of pedagogical creativity, play a large part in upgrading the professional qualifications and level of ideological and political preparation of rural teachers. A growing number of the republic's methods centers are ably organizing work with rural teachers at a high level. Among them are the Akmenskiy, Vilkavishskiy, Klaypedskiy, and Utyanskiy methods centers.

With the aid of rayon methods centers, the republic is widely organizing pedagogical patronage [sheftstvo] by secondary schools over primary and eight-year schools in microrayons. This patronage is regulated by a statute (ratified by the Ministry of Education) that was drafted on the basis of many years of cooperative experience of schools in our and

other fraternal union republics. Microrayon schools headed by a secondary school constitute a unique pedagogical association and coordinate their effort to improve the teaching and upbringing process, to organize universal compulsory secondary education, work with the family and the community, and the vocational guidance of the pupils. Schools staffed by unpaid volunteers have created methods centers and corners for the purpose of assisting teachers in their work on self-education.

We attach paramount importance to the self-education of rural teachers as a form of continuously upgrading their teaching skills and of improving their grasp of methods and ideas.

In the republic's leading rural schools, self-education has become the subject of concern of not only every teacher but also of school principals who, after analyzing the teacher's strong and weak points, make their recommendations to him regarding the basic directions and specific content of his self-education activity. However, as shown by the findings of a study of self-education work in a number of pedagogical collectives of republic rural schools, this function unfortunately is still frequently relegated to a minor place or is totally ignored by the administration of individual schools.

Our party's unceasing, truly fatherly concern for the rural school opens up remarkable perspectives before it. And without a doubt, Lithuania's rural teachers, drawing upon the cooperation and patronly assistance of agricultural enterprises and working with persistence and endurance, will score further successes in improving the teaching and communist education of the younger generation and in preparing it for labor in every way.

The rural school, as one of the main cultural centers in the countryside, is promoting the successful implementation of the party's agrarian policy and the successful implementation of the historic decisions of the 26th CPSU Congress and the May and November (1982) Plenums of its Central Committee.

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